
DIREC
RVISION

1
00:00:00,030 --> 00:00:04,100
Betsy Congdon Lead Engineer for Parker Solar Probe's heat shield. Curtis Wilkerson - Engineer

2
00:00:04,120 --> 00:00:08,110
NASA's Parker Solar Probe is exploring the Sun.

3
00:00:08,120 --> 00:00:14,000
Engineers show us the strength of the spacecraft's protective shield.

4
00:00:14,000 --> 00:00:16,260
Betsy: Here we have a

5
00:00:16,280 --> 00:00:19,840
piece of the heat shield for Parker Solar Probe

6
00:00:19,840 --> 00:00:24,320
which is a sandwich panel, made of carbon

7
00:00:24,340 --> 00:00:27,840
that is like the graphic epoxy you might find in your golf clubs or your tennis rackets

8
00:00:27,840 --> 00:00:32,440
some carbon foam, and then another piece of carbon-carbon on the back.

9
00:00:32,470 --> 00:00:36,450
It's very light weight, as you can see. And here I've got a blowtorch

10
00:00:36,470 --> 00:00:40,640
and I'm gonna use it to get the front surface of this glowing hot.

11
00:00:40,660 --> 00:00:44,700
And then we will have a nice demonstrator come in and touch the back with his hands.

12
00:00:44,720 --> 00:00:48,730
Let's get this started.

13
00:00:48,740 --> 00:00:51,820

30 seconds later

14
00:00:51,820 --> 00:00:56,800
Betsy: You can start seeing it glowing red. The real heat shield gets up

15
00:00:56,820 --> 00:01:00,850
to about 2500 degrees Fahrenheit which we're not going to do today.

16
00:01:00,870 --> 00:01:04,880
But we are going to get it to a couple of hundred degrees Fahrenheit.

17
00:01:04,900 --> 00:01:08,920
It's glowing pretty good now. Curtis, why don't you touch the back surface of that?

18
00:01:09,380 --> 00:01:10,820
What does it feel like?

19
00:01:12,540 --> 00:01:13,740
Curtis: Pretty cool

20
00:01:13,740 --> 00:01:21,020
Betsy: "Nice and cool," he says. Which is just how we like it. Keeping the spacecraft cool.

21
00:01:21,040 --> 00:01:25,860
music

22
00:01:25,860 --> 00:01:29,100
tone