1
00:00:22,340 --> 00:00:20,210
I'm Lori Meggs and I'm bill hubscher

2
00:00:23,990 --> 00:00:22,350
welcome to focus on Marshall for today's

3
00:00:25,490 --> 00:00:24,000
program we are at the activities

4
00:00:27,470 --> 00:00:25,500
building on the marshall center at the

5
00:00:28,849 --> 00:00:27,480
research and Technology Expo that's

6
00:00:31,310 --> 00:00:28,859
right bill in most of the time we have

7
00:00:32,540 --> 00:00:31,320
to go and find technologies but this is

8
00:00:34,069 --> 00:00:32,550
a dream come true for us all the

9
00:00:35,750 --> 00:00:34,079
technologies are here right in one place

10
00:00:38,030 --> 00:00:35,760
road how do we go see what I can find

11
00:00:40,069 --> 00:00:38,040
okay and while Lori gets a head start on

12
00:00:41,360 --> 00:00:40,079
that we are joined now by the chief

13
00:00:43,459 --> 00:00:41,370

technologist here at the marshall center

14
00:00:44,930 --> 00:00:43,469
james bilbro first of all sir thank you

15
00:00:46,970 --> 00:00:44,940
for making time to talk to us today oh

16
00:00:49,340 --> 00:00:46,980
it's my pleasure it's a very important

17
00:00:51,920 --> 00:00:49,350
subject to me well let's get started

18
00:00:53,959 --> 00:00:51,930
with the overall the big picture tell us

19
00:00:55,639 --> 00:00:53,969
just how important technology is to the

20
00:00:59,240 --> 00:00:55,649
agency and to the vision for Space

21
00:01:02,599 --> 00:00:59,250
Exploration well you know NASA is really

22
00:01:05,000 --> 00:01:02,609
all about a cutting edge and you can't

23
00:01:07,160 --> 00:01:05,010
do the kind of research the kind of

24
00:01:09,730 --> 00:01:07,170
missions that that NASA is proposing

25
00:01:12,109 --> 00:01:09,740
particularly with respect to exploration

26
00:01:16,160 --> 00:01:12,119
without having technology development

27
00:01:18,530 --> 00:01:16,170
and so the ability to develop the

28
00:01:21,590 --> 00:01:18,540
technology to get the technology focus

29
00:01:22,999 --> 00:01:21,600
to the needs for the mission are going

30
00:01:24,770 --> 00:01:23,009
to be one of the most challenging and

31
00:01:27,380 --> 00:01:24,780
important things that the agency can do

32
00:01:29,359 --> 00:01:27,390
so how important though is is the

33
00:01:31,670 --> 00:01:29,369
marshall center into the development of

34
00:01:33,289 --> 00:01:31,680
technology for the agency marshall is a

35
00:01:35,890 --> 00:01:33,299
development center so first and foremost

36
00:01:40,190 --> 00:01:35,900
it's primary responsibility is

37
00:01:43,550 --> 00:01:40,200
developing vehicles like the the Ares

38
00:01:44,960 --> 00:01:43,560

one on the Ares 5 the responsibility

39
00:01:48,800 --> 00:01:44,970
that we have relative to the lunar

40
00:01:50,810 --> 00:01:48,810
programs those are those are major

41
00:01:53,450 --> 00:01:50,820
what I call engineering development

42
00:01:56,359 --> 00:01:53,460
programs and yet it's critical not only

43
00:01:57,920 --> 00:01:56,369
to have technology developed in order to

44
00:02:00,440 --> 00:01:57,930
enable those missions but to actually

45
00:02:02,929 --> 00:02:00,450
understand how technology has developed

46
00:02:05,120 --> 00:02:02,939
as you incorporate them from the other

47
00:02:06,980 --> 00:02:05,130
research centers within the agency from

48
00:02:09,650 --> 00:02:06,990
other agencies from industry academia

49
00:02:12,290 --> 00:02:09,660
and so doing technology development at

50
00:02:14,270 --> 00:02:12,300
Marshall not only provides the kind of

51
00:02:16,070 --> 00:02:14,280
technologies that we're going to need

52
00:02:18,440 --> 00:02:16,080
for our future missions but it provides

53
00:02:20,180 --> 00:02:18,450
skills and training to the individuals

54
00:02:22,280 --> 00:02:20,190
and to the programs and projects to

55
00:02:23,900 --> 00:02:22,290
understand what is involved in

56
00:02:25,970 --> 00:02:23,910
technology development you don't always

57
00:02:28,309 --> 00:02:25,980
get from point A to point B in a

58
00:02:29,630 --> 00:02:28,319
straight line thanks very much again for

59
00:02:30,830 --> 00:02:29,640
coming to talk to us today we're going

60
00:02:32,840 --> 00:02:30,840
to see some of those technologies you

61
00:02:34,280 --> 00:02:32,850
were talking about right now here today

62
00:02:36,110 --> 00:02:34,290
so let's go see if we can catch up with

63
00:02:37,520 --> 00:02:36,120

lori i'm here with fred SRAM the

64
00:02:39,170 --> 00:02:37,530
independent research and development

65
00:02:40,309 --> 00:02:39,180
program administrator for marshall and

66
00:02:42,289 --> 00:02:40,319
fred tell me about all of the things

67
00:02:44,720 --> 00:02:42,299
that we're seeing here today well what

68
00:02:46,940 --> 00:02:44,730
you actually have here is a science fair

69
00:02:49,670 --> 00:02:46,950
Hall of Fame because all the people here

70
00:02:51,710 --> 00:02:49,680
are winners at least twice first of all

71
00:02:57,259 --> 00:02:51,720
they won the research funding under our

72
00:03:00,560 --> 00:02:57,269
program competing with maybe 150 others

73
00:03:02,060 --> 00:03:00,570
for program funding maybe 20 out of 150

74
00:03:04,039 --> 00:03:02,070
might get funded so they're already

75
00:03:05,449 --> 00:03:04,049
winners in that respect and then again

76
00:03:08,449 --> 00:03:05,459
because they've actually taken their

77
00:03:13,009 --> 00:03:08,459
idea to a product or to some level of

78
00:03:15,770 --> 00:03:13,019
understanding where some program project

79
00:03:18,229 --> 00:03:15,780
or someone with additional funding that

80
00:03:21,050 --> 00:03:18,239
has a problem or a need for their

81
00:03:23,509 --> 00:03:21,060
technology can see it they can talk to

82
00:03:25,940 --> 00:03:23,519
the innovator about it and then possibly

83
00:03:28,580 --> 00:03:25,950
offer them additional funding for for a

84
00:03:31,039 --> 00:03:28,590
follow-on development effort now one of

85
00:03:33,620 --> 00:03:31,049
the examples maybe the surface mobility

86
00:03:35,270 --> 00:03:33,630
people right here you may want to talk

87
00:03:36,020 --> 00:03:35,280
to them about that all right we're going