



1  
00:00:06,950 --> 00:00:05,510  
when i think of nasa

2  
00:00:09,750 --> 00:00:06,960  
i think of

3  
00:00:16,470 --> 00:00:09,760  
an agency focused on technology at the

4  
00:00:20,310 --> 00:00:18,390  
instead of telling people the specific

5  
00:00:21,670 --> 00:00:20,320  
idea that they need to work on what

6  
00:00:26,310 --> 00:00:21,680  
we're going to do is set grand

7  
00:00:29,429 --> 00:00:26,320  
challenges for our technological pace

8  
00:00:36,470 --> 00:00:29,439  
what we're going to be looking for are

9  
00:00:40,790 --> 00:00:38,229  
the first stage is called early stage

10  
00:00:43,590 --> 00:00:40,800  
innovation it's a new idea how do we

11  
00:00:46,069 --> 00:00:43,600  
assess how practical it is how feasible

12  
00:00:47,830 --> 00:00:46,079  
it is how nasa can use it who can use it

13  
00:00:49,750 --> 00:00:47,840

we have a funnel and many concepts come

14

00:00:51,590 --> 00:00:49,760

in from many directions they have to get

15

00:00:53,910 --> 00:00:51,600

a chance there has to be some vetting a

16

00:00:56,150 --> 00:00:53,920

few will actually turn out to be

17

00:00:57,510 --> 00:00:56,160

worthy of further study further study

18

00:00:59,189 --> 00:00:57,520

usually involves more effort and more

19

00:01:01,189 --> 00:00:59,199

expense so we can't do it for all of

20

00:01:02,869 --> 00:01:01,199

them but this is the initial gate where

21

00:01:04,469 --> 00:01:02,879

we try to give those ideas a chance and

22

00:01:10,630 --> 00:01:04,479

we hope one of them is going to change

23

00:01:14,870 --> 00:01:12,070

the next stage is game changing

24

00:01:16,870 --> 00:01:14,880

technologies a game-changing technology

25

00:01:19,270 --> 00:01:16,880

has the ability to change a customer's

26

00:01:21,190 --> 00:01:19,280

expectation in a profound way

27

00:01:23,510 --> 00:01:21,200

many ideas die because it's very

28

00:01:25,830 --> 00:01:23,520

expensive to transition from small scale

29

00:01:28,310 --> 00:01:25,840

laboratory to a large

30

00:01:29,749 --> 00:01:28,320

mission typically in nasa we've provided

31

00:01:31,590 --> 00:01:29,759

a solution

32

00:01:33,749 --> 00:01:31,600

in the game changing program we're going

33

00:01:34,789 --> 00:01:33,759

to actually provide a capability that we

34

00:01:37,030 --> 00:01:34,799

need

35

00:01:39,190 --> 00:01:37,040

leaving it open to innovation and

36

00:01:41,429 --> 00:01:39,200

high-risk technologies to be proposed

37

00:01:43,510 --> 00:01:41,439

rather than the classic way that nasa

38

00:01:45,190 --> 00:01:43,520

has done it

39

00:01:47,510 --> 00:01:45,200

and once that high-risk technology has

40

00:01:54,630 --> 00:01:47,520

been proven out then it's more readily

41

00:01:59,429 --> 00:01:56,310

once the technology

42

00:02:00,950 --> 00:01:59,439

crosses the game-changing hurdle

43

00:02:03,030 --> 00:02:00,960

it would be brought into cross-cutting

44

00:02:05,350 --> 00:02:03,040

capabilities demonstration to be

45

00:02:07,429 --> 00:02:05,360

demonstrated in relevant environment

46

00:02:08,869 --> 00:02:07,439

we also want to think outside the box

47

00:02:10,710 --> 00:02:08,879

where we're doing things in more

48

00:02:12,869 --> 00:02:10,720

streamline and efficient manner like

49

00:02:15,670 --> 00:02:12,879

testing it on an aircraft or suborbital

50

00:02:18,550 --> 00:02:15,680

platform like a sounding rocket or even

51  
00:02:20,390 --> 00:02:18,560  
on the ground here a test chamber or a

52  
00:02:21,430 --> 00:02:20,400  
lab

53  
00:02:23,350 --> 00:02:21,440  
and

54  
00:02:26,470 --> 00:02:23,360  
nasa needs to be able to collaborate by

55  
00:02:28,150 --> 00:02:26,480  
getting the expertise that exists at

56  
00:02:30,550 --> 00:02:28,160  
various nasa centers

57  
00:02:33,190 --> 00:02:30,560  
industry academia

58  
00:02:35,110 --> 00:02:33,200  
other government agencies

59  
00:02:37,430 --> 00:02:35,120  
we could actually try to

60  
00:02:39,750 --> 00:02:37,440  
broaden from a low

61  
00:02:42,390 --> 00:02:39,760  
maturity level to a mid-material level

62  
00:02:44,790 --> 00:02:42,400  
to a high maturity level and look at

63  
00:02:46,309 --> 00:02:44,800

multiple partners and

64

00:02:52,869 --> 00:02:46,319

customers that would be interested in

65

00:02:56,869 --> 00:02:55,110

we're not developing technology just

66

00:02:59,350 --> 00:02:56,879

playing our sandbox

67

00:03:04,149 --> 00:02:59,360

we're developing technological solutions

68

00:03:08,470 --> 00:03:06,470

for the united states to position itself

69

00:03:12,869 --> 00:03:08,480

as a leader in the future we have to

70

00:03:17,509 --> 00:03:15,350

these are grand challenges for the

71

00:03:20,149 --> 00:03:17,519

agency these are grand challenges that

72

00:03:22,149 --> 00:03:20,159

will engage the nation this is what nasa

73

00:03:24,149 --> 00:03:22,159

was built for and these are the things