1
00:00:05,150 --> 00:00:02,990
so 9/11 conspiracy theorists get a

2
00:00:07,010 --> 00:00:05,160
little bit confused about what happens

3
00:00:09,379 --> 00:00:07,020
when a plane hits something they'd like

4
00:00:11,980 --> 00:00:09,389
to compare other plane crashes more

5
00:00:14,150 --> 00:00:11,990
ordinary plane crashes to the crashes of

6
00:00:16,820 --> 00:00:14,160
the World Trade Center and the

7
00:00:18,740 --> 00:00:16,830
Shanksville crash now these pressures

8
00:00:20,480 --> 00:00:18,750
are very different because most crashes

9
00:00:22,820 --> 00:00:20,490
happen when a plane is either trying to

10
00:00:23,870 --> 00:00:22,830
land or is trying to take off or he's

11
00:00:25,490 --> 00:00:23,880
trying to learn because it's red and

12
00:00:27,080 --> 00:00:25,500
fuel it doesn't have any power

13
00:00:29,029 --> 00:00:27,090

so these crashes are normally at very

14
00:00:31,790 --> 00:00:29,039
slow speed now when a plane comes in to

15
00:00:33,260 --> 00:00:31,800
land it comes in and goes parallel to

16
00:00:36,020 --> 00:00:33,270
the ground until it slows down enough to

17
00:00:37,940 --> 00:00:36,030
stop when a plane crashes where it's

18
00:00:39,619 --> 00:00:37,950
trying to land it's usually because it

19
00:00:41,479 --> 00:00:39,629
goes bit too slow or it goes a bit a

20
00:00:43,069 --> 00:00:41,489
little bit too fast and it just can't

21
00:00:44,990 --> 00:00:43,079
maintain control and eventually

22
00:00:47,510 --> 00:00:45,000
something hits the ground in a way

23
00:00:49,490 --> 00:00:47,520
that's not intended and the plane will

24
00:00:51,380 --> 00:00:49,500
tumble over now we could simulate this

25
00:00:53,600 --> 00:00:51,390
with this by like throwing a plane

26
00:00:55,610 --> 00:00:53,610
around but planes model planes of this

27
00:00:57,260 --> 00:00:55,620
size about two inches incredibly strong

28
00:00:59,990 --> 00:00:57,270
so we have to find some different analog

29
00:01:04,579 --> 00:01:00,000
that we can use instead and what I've

30
00:01:06,380 --> 00:01:04,589
decided to use was an egg XR reasonably

31
00:01:08,149 --> 00:01:06,390
strong you can roll them around you can

32
00:01:10,490 --> 00:01:08,159
you can drop them from a few inches onto

33
00:01:12,980 --> 00:01:10,500
a normal surface and they won't break

34
00:01:14,149 --> 00:01:12,990
they're fairly strong but if I throw

35
00:01:15,679 --> 00:01:14,159
them against the wall obviously it's

36
00:01:18,800 --> 00:01:15,689
going to smash so I'm gonna do three

37
00:01:21,200 --> 00:01:18,810
experiments I'm going to drop it onto a

38
00:01:25,370 --> 00:01:21,210

concrete surface from a a high altitude

39
00:01:27,980 --> 00:01:25,380
I'm gonna try the equivalent of landing

40
00:01:31,840 --> 00:01:27,990
a plane crash landing a plane by bring

41
00:01:34,370 --> 00:01:31,850
it in like this and uncontrollable

42
00:01:38,270 --> 00:01:34,380
trajectory I'm going to try dropping it

43
00:01:40,520 --> 00:01:38,280
into a softer medium which is some cat

44
00:01:42,170 --> 00:01:40,530
litter I have in the box here see what

45
00:01:45,590 --> 00:01:42,180
happens there and I'm going to try

46
00:01:48,109 --> 00:01:45,600
dropping it onto a grid metal grid that

47
00:01:49,550 --> 00:01:48,119
I have it's just a couple of quarter

48
00:01:50,749 --> 00:01:49,560
inch metal square grids

49
00:01:54,469 --> 00:01:50,759
so we'll see what happens when we drop

50
00:01:56,569 --> 00:01:54,479
that on onto it from a high altitude now

51
00:01:59,240 --> 00:01:56,579
is the same as really is going very fast

52
00:02:01,219 --> 00:01:59,250
sideways going very fast down the result

53
00:02:03,590 --> 00:02:01,229
is the same so it's just a an easy way

54
00:02:11,500 --> 00:02:03,600
of getting a consistent velocity so

55
00:02:16,970 --> 00:02:13,789
so here we have the equivalents of a

56
00:02:19,940 --> 00:02:16,980
low-speed plane crash and as you can see

57
00:02:21,740 --> 00:02:19,950
the end result large pieces of egg

58
00:02:24,350 --> 00:02:21,750
that's obvious with the plane has

59
00:02:33,520 --> 00:02:24,360
crashed test two onto concrete from

60
00:02:41,089 --> 00:02:33,530
above and watch my disintegration here

61
00:03:09,649 --> 00:02:41,099
compare that to test three into the cat

62
00:03:19,309 --> 00:03:09,659
litter and this experiment is into a

63
00:03:20,809 --> 00:03:19,319

wire mesh you always have to be careful

64
00:03:23,599 --> 00:03:20,819
when you use scale models to demonstrate

65
00:03:25,220 --> 00:03:23,609
things since a lot of misunderstanding

66
00:03:27,349 --> 00:03:25,230
of physics in the conspiracy world has

67
00:03:29,979 --> 00:03:27,359
to do with scale there's a significant

68
00:03:32,509 --> 00:03:29,989
risk of increasing that confusion

69
00:03:34,970 --> 00:03:32,519
obviously an egg is a very poor scale

70
00:03:37,339 --> 00:03:34,980
model of a plane but in all scale models

71
00:03:38,839 --> 00:03:37,349
we have to have trade-offs here I wanted

72
00:03:40,369 --> 00:03:38,849
something that was both heavy and strong

73
00:03:42,409 --> 00:03:40,379
enough to withstand quite a bit of force

74
00:03:44,990 --> 00:03:42,419
but would also break under stronger

75
00:03:46,939 --> 00:03:45,000
impacts the egg works fine for this even

76
00:03:49,189 --> 00:03:46,949
though it's wrong in many other ways the

77
00:03:51,939 --> 00:03:49,199
model plane would not work at all as the

78
00:03:54,259 --> 00:03:51,949
scale is thousands of times too strong

79
00:03:55,699 --> 00:03:54,269
what we are demonstrating here is that

80
00:03:57,920 --> 00:03:55,709
different circumstances lead to

81
00:04:00,080 --> 00:03:57,930
different results a low-speed shallow

82
00:04:02,869 --> 00:04:00,090
crash breaks the egg open but the shell

83
00:04:05,030 --> 00:04:02,879
is largely intact a high speed steep

84
00:04:06,800 --> 00:04:05,040
angle crash breaks the shell into much

85
00:04:10,009 --> 00:04:06,810
smaller pieces which are ejected long

86
00:04:11,869 --> 00:04:10,019
distances a high speed steep impact into

87
00:04:13,729 --> 00:04:11,879
gravel also shatters the shell into

88
00:04:15,740 --> 00:04:13,739

small pieces but the result is more

89
00:04:17,449 --> 00:04:15,750
constrained in a crater hitting a

90
00:04:19,789 --> 00:04:17,459
surface with holes in it allows some of

91
00:04:21,770 --> 00:04:19,799
the egg to pass through remember these

92
00:04:22,260 --> 00:04:21,780
are not meant to be exact recreations of

93
00:04:24,150 --> 00:04:22,270
the Nile

94
00:04:25,740 --> 00:04:24,160
in packs they just serve to illustrate

95
00:04:27,659 --> 00:04:25,750
the types of differences in

96
00:04:29,460 --> 00:04:27,669
circumstances you should be looking at

97
00:04:32,520 --> 00:04:29,470
and some of the types of differences in

98
00:04:34,619 --> 00:04:32,530
the end results so by all means compare

99
00:04:36,719 --> 00:04:34,629
other plane crashes to the 9/11 crashes

100
00:04:38,909 --> 00:04:36,729
but make sure you always consider the

101
00:04:41,330 --> 00:04:38,919
differences how fast is the plane going

102
00:04:43,589 --> 00:04:41,340
what did it hit and at what angle