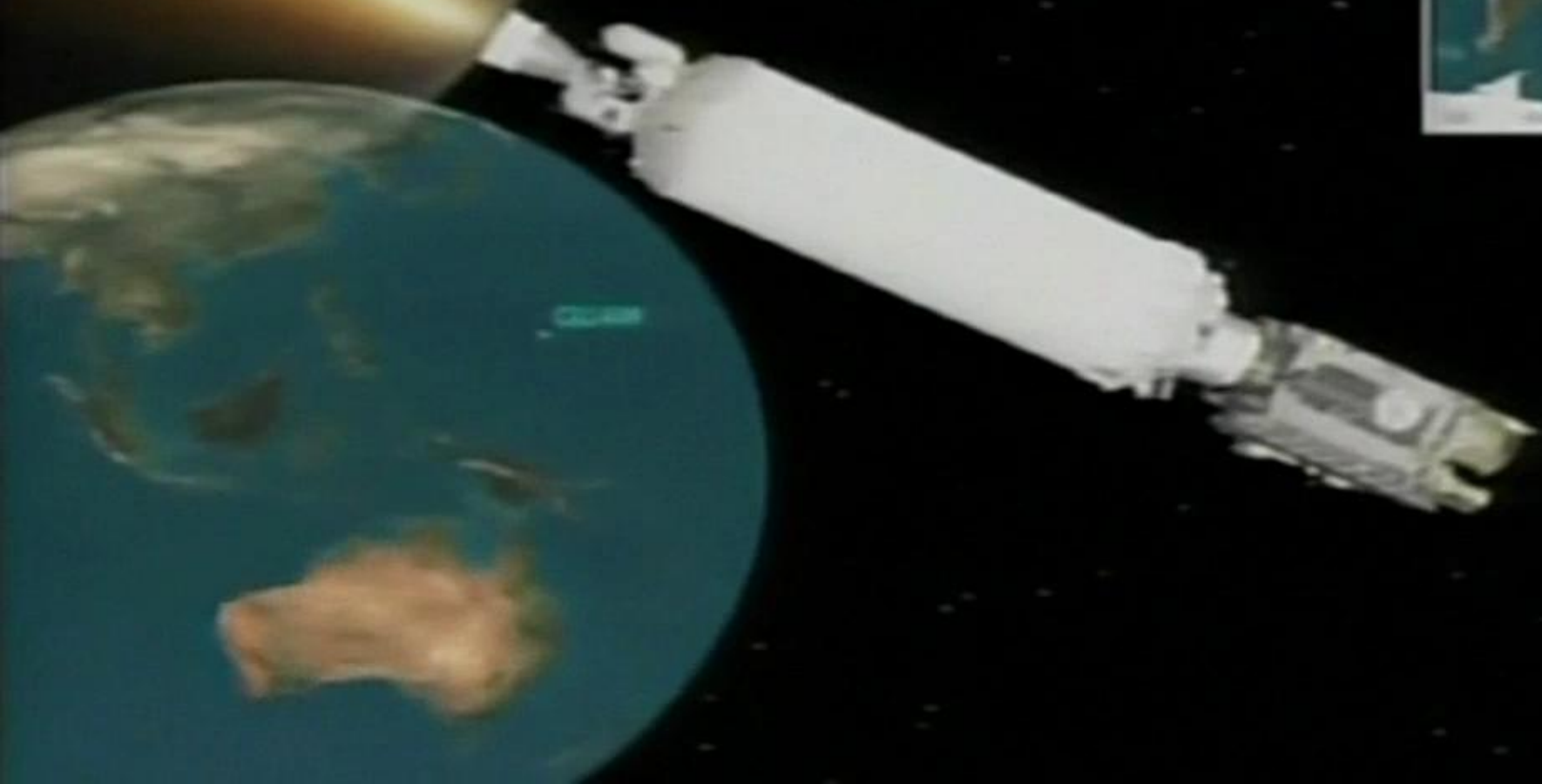


ENGINE CUT-OFF 1

av069 Orbital Parameters TIME  
Time (w/overlap): 0/01:29:11  
Perigee Alt. (nm): 4304.14  
Apogee Alt. (nm): 19012.49  
Inclination (deg): 10.760



LIVE TLM DATA



1  
00:00:09,910 --> 00:00:06,470  
after a

2  
00:00:10,870 --> 00:00:09,920  
spectacular liftoff at 6 42 p.m eastern

3  
00:00:14,310 --> 00:00:10,880  
time

4  
00:00:19,910 --> 00:00:14,320  
atop an atlas v rocket

5  
00:00:25,189 --> 00:00:23,109  
noah's gosar satellite is poised for its

6  
00:00:27,830 --> 00:00:25,199  
flight into space

7  
00:00:29,910 --> 00:00:27,840  
uh just minutes away

8  
00:00:33,670 --> 00:00:29,920  
we're a little bit under four minutes

9  
00:00:35,350 --> 00:00:33,680  
from the centaur third main engine start

10  
00:00:37,350 --> 00:00:35,360  
we'll be listening to the voice of marty

11  
00:00:41,430 --> 00:00:37,360  
malinowski from united launch alliance

12  
00:00:45,750 --> 00:00:44,470  
engineering data and information

13  
00:00:49,910 --> 00:00:45,760

on

14

00:00:53,590 --> 00:00:51,910

centaur has been in a coast phase for

15

00:00:55,990 --> 00:00:53,600

nearly three hours

16

00:00:59,830 --> 00:00:56,000

after the successful second centaur main

17

00:01:45,109 --> 00:01:02,389

everything continues to go well this is

18

00:01:45,119 --> 00:02:06,230

93 seconds

19

00:02:16,949 --> 00:02:08,309

my pressurization is underway in the

20

00:02:31,270 --> 00:02:18,790

about a minute and a half away from the

21

00:02:47,350 --> 00:02:32,869

this entire fuel tank is being

22

00:02:52,790 --> 00:02:51,270

one minute away from the burn

23

00:03:29,190 --> 00:02:52,800

we have

24

00:03:32,869 --> 00:03:31,190

standing by now for the centaur third

25

00:03:35,190 --> 00:03:32,879

main engine start

26  
00:03:38,149 --> 00:03:35,200  
this will be a short burn of only about

27  
00:03:58,630 --> 00:03:38,159  
one and a half minutes

28  
00:04:09,030 --> 00:04:00,470  
and we have ignition

29  
00:04:16,069 --> 00:04:11,190  
since our pu is being commanded at fixed

30  
00:04:16,079 --> 00:04:20,310  
and has now gone to active control

31  
00:04:26,310 --> 00:04:22,230  
the burn is underway and everything is

32  
00:04:28,870 --> 00:04:28,150  
chamber pressure locks pump discharge

33  
00:04:31,510 --> 00:04:28,880  
and

34  
00:04:35,590 --> 00:04:31,520  
interior pressures all look good for the

35  
00:04:35,600 --> 00:04:52,870  
mass error is basically zero

36  
00:05:14,469 --> 00:04:55,590  
engine burns progressing well all levels

37  
00:05:29,990 --> 00:05:16,310  
standing by for centaur main engine

38  
00:05:36,070 --> 00:05:31,909

and we have mikko injured shut down

39

00:05:40,150 --> 00:05:38,629

mikko main engine cutoff everything went

40

00:05:42,070 --> 00:05:40,160

well on the burn

41

00:05:44,710 --> 00:05:42,080

spacecraft separation

42

00:05:46,230 --> 00:05:44,720

is planned for our fuel tank has been

43

00:05:47,990 --> 00:05:46,240

vented down

44

00:05:50,310 --> 00:05:48,000

pressures are now stable

45

00:05:52,950 --> 00:05:50,320

million bottles are stable as well

46

00:05:54,629 --> 00:05:52,960

batteries look good spacecraft

47

00:05:56,629 --> 00:05:54,639

separation

48

00:05:58,550 --> 00:05:56,639

planned for about

49

00:06:00,710 --> 00:05:58,560

10 14 p.m

50

00:06:02,629 --> 00:06:00,720

we have become the turn to spacecraft

51  
00:06:04,469 --> 00:06:02,639  
separation attitude

52  
00:06:06,550 --> 00:06:04,479  
we will not see live video of the

53  
00:06:08,469 --> 00:06:06,560  
separation however we are expecting to

54  
00:06:16,469 --> 00:06:08,479  
receive a video playback about 12

55  
00:06:27,670 --> 00:06:18,550  
center's going to 50 percent

56  
00:06:27,680 --> 00:06:41,270  
centaur moving to the deploy attitude

57  
00:06:45,830 --> 00:06:43,350  
center fuel tank is being vented down

58  
00:06:45,840 --> 00:07:08,150  
pressure is now stable

59  
00:07:12,629 --> 00:07:09,830  
centaur has completed the term

60  
00:07:14,469 --> 00:07:12,639  
spacecraft separation attitude

61  
00:08:03,510 --> 00:07:14,479  
just about a minute away from spacecraft

62  
00:08:03,520 --> 00:08:18,869  
standing by for spacecraft

63  
00:08:26,390 --> 00:08:20,469

and we have indication of spacecraft

64

00:08:30,550 --> 00:08:28,710

and applause here in the atlas space

65

00:08:33,110 --> 00:08:30,560

flight operations center mission

66

00:08:35,909 --> 00:08:33,120

director center as we see spacecraft

67

00:08:42,310 --> 00:08:38,149

spacecraft separation

68

00:08:44,389 --> 00:08:42,320

at 10 14 and 4 seconds pm eastern time

69

00:08:47,110 --> 00:08:44,399

as the spacecraft soared high above the

70

00:08:49,829 --> 00:08:47,120

java sea west of indonesia

71

00:08:51,350 --> 00:08:49,839

nasa's goes-r flies free for the first

72

00:08:53,350 --> 00:08:51,360

time

73

00:08:55,910 --> 00:08:53,360

in an elliptical orbit whose apogee is

74

00:08:58,550 --> 00:08:55,920

close to its final geosynchronous

75

00:09:00,310 --> 00:08:58,560

altitude

76

00:09:03,430 --> 00:09:00,320

next major milestone

77

00:09:05,430 --> 00:09:03,440

the goes-r solar array deploy scheduled

78

00:09:08,070 --> 00:09:05,440

5 minutes and 50 seconds after

79

00:09:13,430 --> 00:09:08,080

spacecraft separation so at about 10 20

80

00:09:17,670 --> 00:09:15,670

continue to look very good

81

00:09:20,230 --> 00:09:17,680

the five panels will be extended out

82

00:09:22,070 --> 00:09:20,240

looking at the sun in step one of the

83

00:09:27,030 --> 00:09:22,080

deploy

84

00:09:28,790 --> 00:09:27,040

and two solar instruments off the body

85

00:09:36,870 --> 00:09:28,800

of the satellite is scheduled about 10

86

00:09:41,509 --> 00:09:38,870

the launch team here

87

00:09:45,350 --> 00:09:41,519

at cape canaveral air force station

88

00:09:47,110 --> 00:09:45,360

celebrating the atlas centaur rocket did

89

00:09:49,350 --> 00:09:47,120

its job once again

90

00:09:51,829 --> 00:09:49,360

delivering a spacecraft

91

00:09:53,509 --> 00:09:51,839

to the perfect location in space as the

92

00:09:56,550 --> 00:09:53,519

atlas 5 has

93

00:09:59,430 --> 00:09:56,560

had a 100 percent success rate

94

00:10:01,190 --> 00:09:59,440

actual position versus pre-flight

95

00:10:04,470 --> 00:10:01,200

predictions is

96

00:10:06,790 --> 00:10:04,480

in excellent agreement very small deltas

97

00:10:13,269 --> 00:10:06,800

with that this concludes the plus count

98

00:10:17,670 --> 00:10:15,030

marty malinowski from united launch

99

00:10:19,110 --> 00:10:17,680

alliance signing off

100

00:10:20,310 --> 00:10:19,120

after a

101

00:10:22,389 --> 00:10:20,320

successful

102

00:10:23,910 --> 00:10:22,399

atlas mission