



Jim Bridenstine

Administrator
NASA

1
00:00:03,169 --> 00:00:05,672
WELL, I'M HAPPY TO JOIN YOU HERE

2
00:00:05,739 --> 00:00:08,108
TODAY IN MY THIRD WEEK AS

3
00:00:08,174 --> 00:00:09,275
NASA ADMINISTRATOR TO TALK

4
00:00:09,342 --> 00:00:11,111
ABOUT THE AGENCY'S VISION FOR

5
00:00:11,177 --> 00:00:11,478
MARS.

6
00:00:11,478 --> 00:00:13,880
I WANT TO TAKE A MOMENT TO THANK

7
00:00:13,947 --> 00:00:15,515
ALL OF THOSE FOLKS THAT ARE

8
00:00:15,582 --> 00:00:18,385
WATCHING ONLINE.

9
00:00:18,451 --> 00:00:20,820
I HAVE HEARD IT'S THOUSANDS, AND

10
00:00:20,887 --> 00:00:22,222
IT'S GREAT INTERESTS SO MUCH

11
00:00:22,288 --> 00:00:23,690
FROM IN THIS EFFORT OF THIS

12
00:00:23,757 --> 00:00:25,892
NATION AND THE WORLD TO GET TO

13
00:00:25,959 --> 00:00:28,862

MARS.

14

00:00:28,928 --> 00:00:31,164

MAY 4TH, 1801, THOMAS JEFFERSON

15

00:00:31,231 --> 00:00:33,500

DELIVERED HIS FIRST INAUGURAL

16

00:00:33,566 --> 00:00:34,000

ADDRESS.

17

00:00:34,000 --> 00:00:36,569

DISCUSSING "A RISING NATION

18

00:00:36,636 --> 00:00:38,705

SPREAD OVER A WIDE AND FRUITFUL

19

00:00:38,772 --> 00:00:41,141

LAND, TRAVERSING ALL THE SEAS

20

00:00:41,207 --> 00:00:42,842

WITH RICH PRODUCTION OF THEIR

21

00:00:42,909 --> 00:00:45,678

INDUSTRY, ENGAGED IN COMMERCE

22

00:00:45,745 --> 00:00:46,946

WITH THE NATION.

23

00:00:47,013 --> 00:00:49,315

ADVANCING RAPIDLY TO

24

00:00:49,382 --> 00:00:51,317

DESTINATIONS BEYOND THE REACH OF

25

00:00:51,384 --> 00:00:52,752

MORTAL EYE.

26
00:00:52,819 --> 00:00:54,187
THEY SAY THAN TWO YEARS LATER

27
00:00:54,254 --> 00:00:57,023
PRESIDENT JEFFERSON SENT A

28
00:00:57,090 --> 00:00:59,125
CONFIDENTIAL REQUEST TO CONGRESS

29
00:00:59,192 --> 00:01:02,829
ASKING FOR \$2,500 TO EXPLORE THE

30
00:01:02,896 --> 00:01:03,363
WEST.

31
00:01:03,363 --> 00:01:05,265
WHEN APPROVED HE GAVE

32
00:01:05,331 --> 00:01:08,034
INSTRUCTIONS TO MEREWETHER LEWIS

33
00:01:08,101 --> 00:01:10,670
AND WILLIAM CLARK.

34
00:01:10,737 --> 00:01:13,206
IT WAS CLEAR HIS INTERESTS WAS

35
00:01:13,273 --> 00:01:15,742
SCIENCE AND DISCOVERY.

36
00:01:15,809 --> 00:01:17,710
>> HE REQUESTED DESCRIPTION OF

37
00:01:17,777 --> 00:01:19,979
ANIMALS, VEGETABLES AND MINERALS

38
00:01:20,046 --> 00:01:22,282

AND OTHER CURIOUS THINGS.

39

00:01:22,348 --> 00:01:25,885
FOR THE NEXT 66 YEARS, OUR

40

00:01:25,952 --> 00:01:28,221
MOBILITY WAS LARGELY UNCHANGED.

41

00:01:28,288 --> 00:01:31,191
OUR MOBILITY WET.

42

00:01:31,257 --> 00:01:33,593
MANY IDEAS AND CONCEPTS WERE

43

00:01:33,660 --> 00:01:37,163
DEVELOPED AND PLANS MADE, BUT

44

00:01:37,230 --> 00:01:38,231
THE GOVERNMENT SIMPLY COULD NOT

45

00:01:38,298 --> 00:01:39,232
DO IT ALONE.

46

00:01:39,299 --> 00:01:40,633
NOTHING MATERIALIZED.

47

00:01:40,700 --> 00:01:44,838
IN 1860 AND 1861.

48

00:01:44,904 --> 00:01:46,940
THE US HOUSE PASSED BILLS TO

49

00:01:47,006 --> 00:01:48,908
BUILD A RAILROAD WEST.

50

00:01:48,975 --> 00:01:51,110
THE SENATE REFUSED.

51
00:01:51,177 --> 00:01:53,947
CONGRESS PASSED A PACIFIC

52
00:01:54,013 --> 00:01:55,248
RAILROAD ACT.

53
00:01:55,315 --> 00:01:57,650
ENABLING PUBLIC FUNDS TO SUPPORT

54
00:01:57,717 --> 00:01:59,886
PRIVATE EQUITY AND PRIVATE BONDS

55
00:01:59,953 --> 00:02:02,455
TO FINALLY BUILD THE RAIL ROADS

56
00:02:02,522 --> 00:02:06,526
WEST.
AND DELIVER MORE COMMERCE, MORE

57
00:02:06,593 --> 00:02:07,794
SETTLEMENT, MORE ECONOMIC GROWTH

58
00:02:07,861 --> 00:02:10,530
AND A STRONGER PROSPEROUS

59
00:02:10,597 --> 00:02:11,965
AMERICA WHICH EVENTUALLY LED TO

60
00:02:12,031 --> 00:02:16,536
A FREER AND SAFER WORLD.

61
00:02:16,603 --> 00:02:18,938
ON SEPTEMBER 12TH, 1962, JOHN F

62
00:02:19,005 --> 00:02:20,773
KENNEDY DELIVERED HIS OWN

63

00:02:20,840 --> 00:02:21,908
SCIENCE AND DISCOVERY CHALLENGE

64
00:02:21,975 --> 00:02:22,509
FOR AMERICA.

65
00:02:22,575 --> 00:02:25,512
AT RICE UNIVERSITY, MY ALMA

66
00:02:25,578 --> 00:02:30,183
MATER, AND ON JULY 20TH.

67
00:02:30,250 --> 00:02:30,750
1969.

68
00:02:30,817 --> 00:02:33,486
NEIL ARMSTRONG AND BUZZ ALD RUM

69
00:02:33,553 --> 00:02:36,890
WALKED ON THE LUNA SURFACE.

70
00:02:36,956 --> 00:02:39,125
WE IN THIS ROOM KNOW THAT THIS

71
00:02:39,192 --> 00:02:42,061
IS THE BEGINNING.

72
00:02:42,128 --> 00:02:44,397
NEIL AND BUZZ ALD RUN.

73
00:02:44,464 --> 00:02:46,966
IF HE WAS HERE HE'D TELL YOU

74
00:02:47,033 --> 00:02:52,272
BUZZ ALDRIN IS BUZZ ALDRIN.

75
00:02:52,338 --> 00:02:57,210
AFTER 66 YEARS AFTER LEWIS AND

76

00:02:57,277 --> 00:02:59,812

CLARK EXPEDITION WE BUILT THE

77

00:02:59,879 --> 00:03:00,246

RAILROAD.

78

00:03:00,246 --> 00:03:02,515

IT TOOK 66 YEARS.

79

00:03:02,582 --> 00:03:05,818

49 YEARS AFTER APOLLO 11, IT'S

80

00:03:05,885 --> 00:03:08,054

TIME TO BUILD OUR OWN RAILROAD.

81

00:03:08,121 --> 00:03:10,823

LIKE THEN, WE NEED TO ENABLE

82

00:03:10,890 --> 00:03:12,692

PUBLIC FUNDS TO SUPPORT PRIVATE

83

00:03:12,759 --> 00:03:15,328

EQUITY AND BONDS TO DELIVER MORE

84

00:03:15,395 --> 00:03:15,795

COMMERCE.

85

00:03:15,795 --> 00:03:17,764

ECONOMIC GROWTH AND SOLIDIFY

86

00:03:17,830 --> 00:03:20,667

AMERICAN LEADERSHIP IN SPACE,

87

00:03:20,733 --> 00:03:22,235

SCIENCE AND DISCOVERY.

88

00:03:22,302 --> 00:03:24,704
I'M FORTUNATE THAT MY TIME COMES

89
00:03:24,771 --> 00:03:29,142
ON THE HEELS OF MICHAEL GRIFFIN,

90
00:03:29,208 --> 00:03:32,412
CHARLIE BOLDEN WHO ENVISIONED

91
00:03:32,478 --> 00:03:34,480
AND ADVANCED THE ORBIT.

92
00:03:34,547 --> 00:03:36,015
LOWERING THE COST AND INCREASING

93
00:03:36,082 --> 00:03:37,417
THE ACCESS TO SPACE.

94
00:03:37,483 --> 00:03:40,153
THE MODEL CAN BE EXTENDED TO AND

95
00:03:40,219 --> 00:03:42,555
AROUND THE ROOM AND DEEPER INTO

96
00:03:42,622 --> 00:03:44,524
SPACE, INCLUDING MARS.

97
00:03:44,591 --> 00:03:45,992
MOVING INTO THE PRESENT.

98
00:03:46,059 --> 00:03:48,494
SATURDAY, WE LUGED INSIGHT TO

99
00:03:48,561 --> 00:03:48,895
MARS.

100
00:03:48,895 --> 00:03:51,831
THIS WAS A GOVERNMENT LANDER

101
00:03:51,898 --> 00:03:54,300
BUILT BY AMERICAN INDUSTRY WITH

102
00:03:54,367 --> 00:03:56,402
INTERNATIONAL PARTNERS, LAUNCHED

103
00:03:56,469 --> 00:03:59,439
ON A COMMERCIALY PROCURED

104
00:03:59,505 --> 00:04:02,675
ULA ROCKET FROM AN AIR FORCE

105
00:04:02,742 --> 00:04:05,511
BASE.
>> THIS IS, IN FACT, EVIDENCE

106
00:04:05,578 --> 00:04:07,213
THAT WE ARE BUILDING THE

107
00:04:07,280 --> 00:04:07,647
RAILROAD.

108
00:04:07,647 --> 00:04:10,450
TIE BY TIE, STAKE BY STAKE.

109
00:04:10,516 --> 00:04:11,784
INSIGHT WILL HELP US UNDERSTAND

110
00:04:11,851 --> 00:04:14,554
THE HISTORY OF MARS.

111
00:04:14,621 --> 00:04:16,856
SO WE CAN BETTER UNDERSTAND OUR

112
00:04:16,923 --> 00:04:17,924
OWN PLANET.

113
00:04:17,991 --> 00:04:21,794
SOME PEOPLE ONLINE MAY NOT BE

114
00:04:21,861 --> 00:04:22,195
AWARE.

115
00:04:22,195 --> 00:04:23,296
THERE ARE PROBABLY YOUNG FOLKS

116
00:04:23,363 --> 00:04:24,130
LISTENING TODAY.

117
00:04:24,197 --> 00:04:27,266
MARS USED TO HAVE A VAST OCEAN.

118
00:04:27,333 --> 00:04:30,970
TWO-THIRDS OF MARS HAD AN OCEAN.

119
00:04:31,037 --> 00:04:33,706
A MAGNETOSPHERE TO PROTECT IT.

120
00:04:33,773 --> 00:04:36,409
AT SOME POINT IN THE PAST MARS

121
00:04:36,476 --> 00:04:36,843
CHANGED.

122
00:04:36,843 --> 00:04:37,710
WE NEED TO UNDERSTAND WHAT

123
00:04:37,777 --> 00:04:38,745
CAUSED THAT.

124
00:04:38,811 --> 00:04:42,048
WHAT IS THE HISTORY SO WE CAN

125
00:04:42,115 --> 00:04:43,583

BETTER UNDERSTAND OUR OWN

126

00:04:43,650 --> 00:04:43,983

PLANET.

127

00:04:43,983 --> 00:04:47,387

SINCE THIS IS THE HUMAN TO MARS

128

00:04:47,453 --> 00:04:48,421

SUMMIT.

129

00:04:48,488 --> 00:04:50,390

INSIGHT HELPS TO UNDERSTAND RISK

130

00:04:50,456 --> 00:04:51,290

TO MUSEUM.

131

00:04:51,357 --> 00:04:54,260

MARS IS CLOSER TO THE ASTEROID

132

00:04:54,327 --> 00:04:54,661

BELT.

133

00:04:54,661 --> 00:04:56,696

IT HAS ITS OWN MEDIA SHOWERS.

134

00:04:56,763 --> 00:04:59,332

AND A LESS THICK ATMOSPHERE

135

00:04:59,399 --> 00:05:02,335

MEANS THERE'S MORE DANGER SHOULD

136

00:05:02,402 --> 00:05:05,304

HUMANS - WHEN HUMANS GETS TO

137

00:05:05,371 --> 00:05:05,738

MARS.

138
00:05:05,738 --> 00:05:08,508
MARS HAS MARS QUAKES AND VOOL

139
00:05:08,574 --> 00:05:08,908
CANOES.

140
00:05:08,908 --> 00:05:11,444
>> INSIGHT IS BETTER GOING TO

141
00:05:11,511 --> 00:05:13,112
UNDERSTAND THE RISK TO HUMANS.

142
00:05:13,179 --> 00:05:15,715
WHEN WE GO WE'LL BE BETTERED

143
00:05:15,782 --> 00:05:16,783
INFORMED AND PREPARE.

144
00:05:16,849 --> 00:05:20,219
AS MANY OF YOU KNOW, A FEW DAYS

145
00:05:20,286 --> 00:05:23,389
AGO MANY RELEASED A DRAFT RSP TO

146
00:05:23,456 --> 00:05:26,793
HELP US DELIVER PAYLOADS TO THE

147
00:05:26,859 --> 00:05:27,193
MOON.

148
00:05:27,193 --> 00:05:29,929
SOME OF YOU ARE CONCERNED, IF I

149
00:05:29,996 --> 00:05:31,764
SHOULD SAY SOME OF YOU ARE

150
00:05:31,831 --> 00:05:33,232

CONCERNED THAT THE FOCUS IN THE

151

00:05:33,299 --> 00:05:36,202

COMING YEARS IS THE MOON, DON'T

152

00:05:36,269 --> 00:05:38,104

BE.

THE PRESIDENT'S VISION

153

00:05:38,171 --> 00:05:42,008

EMPHASISED THAT OUR EXPLORATION

154

00:05:42,075 --> 00:05:44,877

CAMPAIGN WILL ESTABLISH AMERICAN

155

00:05:44,944 --> 00:05:47,413

LEADERSHIP IN THE EXCLAMATION OF

156

00:05:47,480 --> 00:05:47,947

MARS.

157

00:05:47,947 --> 00:05:49,382

WE ARE DOING THE MOON AND MARS

158

00:05:49,449 --> 00:05:51,684

IN TANDEM AND THE MISSIONS ARE

159

00:05:51,751 --> 00:05:53,152

SUPPORTIVE OF EACH OTHER.

160

00:05:53,219 --> 00:05:54,787

OUR RETURN TO THE SURFACE OF THE

161

00:05:54,854 --> 00:05:57,890

MOON WILL ALLOW US TO IMPROVE

162

00:05:57,957 --> 00:05:59,492

AND ADVANCE TECHNOLOGIES THAT

163

00:05:59,559 --> 00:06:01,994

WILL FEED FORWARD TO MARS.

164

00:06:02,061 --> 00:06:05,064

PRECISION LANDING SYSTEMS.

165

00:06:05,131 --> 00:06:06,065

ORBITAL HABITATION.

166

00:06:06,132 --> 00:06:08,935

SURFACE HABITATION AND MOBILITY.

167

00:06:09,001 --> 00:06:10,436

LONG DURATION LIFE SUPPORT.

168

00:06:10,503 --> 00:06:11,871

OPERATIONS AND MUCH MORE

169

00:06:11,938 --> 00:06:13,940

ENABLING US TO LAND THE FIRST

170

00:06:14,006 --> 00:06:16,375

AMERICANS ON THE RED PLANET.

171

00:06:16,442 --> 00:06:18,177

WHILE THESE LUNAR EFFORTS ARE

172

00:06:18,244 --> 00:06:20,113

UNDER WAY, WE ARE PREPARING FOR

173

00:06:20,179 --> 00:06:21,347

MARS 2020.

174

00:06:21,414 --> 00:06:23,549

WHICH WILL BE THE MOST ADVANCED

175

00:06:23,616 --> 00:06:25,685
ROVER EVER LAUNCHED TO MARS.

176
00:06:25,752 --> 00:06:29,088
AND WHICH INCLUDES A CRITICAL

177
00:06:29,155 --> 00:06:31,758
HUMAN MISSION PRECURSOR PAYOFF

178
00:06:31,824 --> 00:06:32,158
MOXY.

179
00:06:32,158 --> 00:06:34,460
IT WILL DEMONSTRATE FOR THE

180
00:06:34,527 --> 00:06:36,629
FIRST TIME OUR ABILITY TO

181
00:06:36,696 --> 00:06:38,397
PROCESS OXYGEN FROM THE CARBON

182
00:06:38,464 --> 00:06:43,102
DIOXIDE IN THE MARCHAND ATMOSSE

183
00:06:43,169 --> 00:06:46,372
(MARTIAN ATMOSPHERE, AND

184
00:06:46,439 --> 00:06:48,174
HARDWARE FOR A SCAMP RETURN

185
00:06:48,241 --> 00:06:48,841
MISSION.

186
00:06:48,908 --> 00:06:51,310
IT WILL ENABLE AND INFORM FUTURE

187
00:06:51,377 --> 00:06:55,782
HUMAN EXPLORATION MISSIONS.

188

00:06:55,848 --> 00:06:57,850

NASA IS WORKING TO BUILD A

189

00:06:57,917 --> 00:07:00,419

SUSTAINABLE AND ENDURING

190

00:07:00,486 --> 00:07:02,555

CAPABILITY STEADY CADENCE OF

191

00:07:02,622 --> 00:07:04,157

MISSIONS TO DEEP SPACE.

192

00:07:04,223 --> 00:07:06,726

THIS IS WHY WE NEED A THRIVING

193

00:07:06,793 --> 00:07:08,694

LEO ECONOMY EXPANDING DEEPER

194

00:07:08,761 --> 00:07:11,197

INTO SPACE, AND WE NEED A

195

00:07:11,264 --> 00:07:14,867

GOVERNMENT BACKBONE TO EXPLORE

196

00:07:14,934 --> 00:07:17,170

WHERE AN ECONOMY DOESN'T YET

197

00:07:17,236 --> 00:07:17,637

ECONOMIST.

198

00:07:17,637 --> 00:07:20,740

WE NEED THE SPACE SYSTEM AND THE

199

00:07:20,807 --> 00:07:22,208

ORION CREW VEHICLE.

200

00:07:22,275 --> 00:07:24,911
WE NEED A THRIVING INDUSTRIAL

201
00:07:24,977 --> 00:07:28,247
BASE, AND A WORLDWIDE COALITION

202
00:07:28,314 --> 00:07:29,749
FOCUSED ON THE GOAL AND

203
00:07:29,816 --> 00:07:32,084
SUSTAINING IT BY INSPIRING THE

204
00:07:32,151 --> 00:07:33,252
NEXT GENERATION.

205
00:07:33,319 --> 00:07:38,524
THE HUMAN TO MARS SUMMIT.

206
00:07:38,591 --> 00:07:41,794
SERVES AS PART OF IT.

207
00:07:41,861 --> 00:07:44,497
I SAW THE MASSIVE IMPACT THAT

208
00:07:44,564 --> 00:07:46,399
THE WORK OF THE SPACE COMMUNITY

209
00:07:46,465 --> 00:07:49,135
HAS, ON INSPIRING CHILDREN AND

210
00:07:49,202 --> 00:07:49,769
CHANGING LIVES.

211
00:07:49,836 --> 00:07:51,370
EVERY PERSON HAS A LIFE

212
00:07:51,437 --> 00:07:52,872
EXPERIENCE, GETTING THEM

213
00:07:52,939 --> 00:07:53,940
INTERESTED IN SCIENCE DISCOVERY

214
00:07:54,006 --> 00:07:55,775
AND EXPLORATION.

215
00:07:55,842 --> 00:07:57,510
THIS SUMMIT IS CRITICAL.

216
00:07:57,577 --> 00:08:00,179
WE NOT ONLY NEED ALL OF YOU IN

217
00:08:00,246 --> 00:08:03,015
THIS ROOM WHO ARE SOLD ON THE

218
00:08:03,082 --> 00:08:04,717
EXPLORATION, OR THE AEROSPACE

219
00:08:04,784 --> 00:08:06,219
GROUPS AND PASSIONS THAT ARE

220
00:08:06,285 --> 00:08:08,788
TIED TO IT.

221
00:08:08,855 --> 00:08:12,758
WE NEED THE NEXT GENERATION.

222
00:08:12,825 --> 00:08:16,796
THOMAS JEFFERSON'S DESIRE TO

223
00:08:16,863 --> 00:08:19,131
EXPLORE PROCEEDED THE INAUGURAL.

224
00:08:19,198 --> 00:08:22,268
HE WAS INSPIRED BY THE STORIES

225

00:08:22,335 --> 00:08:26,572
OF CAPTAIN JAMES COOK WHO LED

226
00:08:26,639 --> 00:08:27,173
EXPEDITIONS.

227
00:08:27,240 --> 00:08:29,308
DISCOVERING NEW PLACES AND

228
00:08:29,375 --> 00:08:31,210
MAKING SCIENTIFIC DISCOVERIES.

229
00:08:31,277 --> 00:08:34,247
THIS MOTIVATED THOMAS JEFFERSON

230
00:08:34,313 --> 00:08:36,482
TO LEAD AMERICA TOWARDS SCIENCE,

231
00:08:36,549 --> 00:08:38,017
DISCOVERY AND EXPLORATION

232
00:08:38,084 --> 00:08:40,386
RESULTING IN MORE COMMERCE,

233
00:08:40,453 --> 00:08:41,654
SETTLEMENT AND ECONOMIC GROWTH.

234
00:08:41,721 --> 00:08:44,624
AND A STRONGER PROSPEROUS

235
00:08:44,690 --> 00:08:46,058
AMERICA, WHICH EVENTUALLY LED TO

236
00:08:46,125 --> 00:08:47,994
A FREER AND SAFER WORLD.

237
00:08:48,060 --> 00:08:50,997
YOU IN THIS ROOM ARE DOING NO

238

00:08:51,063 --> 00:08:53,532

LESS, AND I AND THE NASA

239

00:08:53,599 --> 00:08:55,067

FAMILY ARE EXCEPTIONALLY

240

00:08:55,134 --> 00:08:56,068

GRATEFUL.