



1

00:00:00,770 --> 00:00:04,880

HELLO EVERYBODY I AM J.D.

HARRINGTON. NASA'S PUBLIC AFFAIRS OFFICER FOR AERONAUTICS RESEARCH

2

00:00:04,880 --> 00:00:08,930

MISSION DIRECTOR.

HEADQUARTERS HERE IN D.C. IN I WOULD

3

00:00:08,930 --> 00:00:11,240

LIKE WELCOME YOU TO TODAY'S NEWS

CONFERENCE.

4

00:00:11,240 --> 00:00:15,619

WE WILL TALK ABOUT NASA AERONAUTICAL

RESEARCH PORTFOLIO, WE WILL TALK

5

00:00:15,619 --> 00:00:19,510

ABOUT THE PRESIDENT'S FISCAL

YEAR OF 2017 BUDGET.

6

00:00:19,510 --> 00:00:23,030

PLUS WHAT THAT ENABLES US TO DO

OVER NEXT TEN YEARS.

7

00:00:23,030 --> 00:00:26,800

WE HAVE ALSO A SPECIAL

ANNOUNCEMENTS WE ARE KIND OF

8

00:00:26,800 --> 00:00:29,890

EXCITED ABOUT.

WE ALSO HAVE THREE PANELIST THAT

9

00:00:29,890 --> 00:00:32,880

WILL JOIN US TODAY EACH DWUN

WILL GIVE BRIEF REMARKS.

10

00:00:32,880 --> 00:00:34,829

GIVE ANNOUNCEMENT.

AS WE JUST TALKED ABOUT.

11  
00:00:34,829 --> 00:00:39,500  
AND THEN WE WILL OPEN IT UP TO  
QUESTIONS AND ANSWER.

12  
00:00:39,500 --> 00:00:43,829  
THIS PRESENTATION LAST NO MORE  
THAN AN HOUR.

13  
00:00:43,829 --> 00:00:47,890  
TODAY PANELIST INCLUDED CHARLIE  
BOLDEN, NASA ADMINSTRATOR FROM

14  
00:00:47,890 --> 00:00:50,940  
HEADQUARTERS IN WASHINGTON,  
D.C..

15  
00:00:50,940 --> 00:00:54,850  
WE ALSO HAVE JAIWON SHIN.  
ADMINSTRATOR OF THE RESEARCH

16  
00:00:54,850 --> 00:00:59,280  
MISSION DIRECTOR ALSO IN D.C.  
AS WELL AS DAVID MELCHER

17  
00:00:59,280 --> 00:01:03,329  
PRESIDENT AND CHIEF EXECUTIVE  
OFFICER AEROSPACE ASSOCIATION

18  
00:01:03,329 --> 00:01:11,600  
OUT OF ARLINGTON VIRGINIA WITH  
THAT WE WILL WELCOME CHARLIE.

19  
00:01:11,600 --> 00:01:16,209  
FOR AM OUT PARTICULARLY OUR  
INDUSTRY PARTNERS AND FRIENDS I

20  
00:01:16,209 --> 00:01:19,740  
HAD CHANCE TO MEET SOME THAT I  
HAVE HAD AN OPPORTUNITY TO MEET

21  
00:01:19,740 --> 00:01:21,880  
BEFORE.  
HOPEFULLY WE WILL GET TO SEE A

22  
00:01:21,880 --> 00:01:25,869  
LOT MORE OF EACH OTHER FOR THOSE  
OF YOU FROM IMMEDIATE COME ON UP

23  
00:01:25,869 --> 00:01:28,649  
AND YOU KNOW FEEL THROUGH TO ASK  
QUESTIONS LATER.

24  
00:01:28,649 --> 00:01:32,679  
NOT RIGHT NOW.  
I DO WANT TO SAY HOW HAPPY I AM

25  
00:01:32,679 --> 00:01:34,990  
TO BE HERE.  
I DON'T THINK THERE IS A BETTER

26  
00:01:34,990 --> 00:01:40,899  
PLACE, A BETTER VENUE THAN TO BE  
RIGHT HERE AT REAGAN NATIONAL

27  
00:01:40,899 --> 00:01:44,539  
AIRPORT TODAY FOR WHAT WE ARE  
ABOUT TO TALK ABOUT.

28  
00:01:44,539 --> 00:01:51,450  
PERSONALLY, I LOVE LEAP YEARS  
AND SINCE THIS IS LEAP DAY, I

29  
00:01:51,450 --> 00:01:56,200  
THINK THE REASON I LIKE LEAP  
YEARS SO MUCH IS BECAUSE NASA

30  
00:01:56,200 --> 00:01:59,429  
ALWAYS TALKING ABOUT TAKING  
GIANT LEAPS TO BENEFIT HUMAN

31  
00:01:59,429 --> 00:02:01,899  
KIND.  
SO WHAT A MORE APPROPRIATE DAY

32  
00:02:01,899 --> 00:02:04,739  
THAN LEAP DAY OF LEAP YEAR TO  
TALK ABOUT WHAT ARE GOING TO

33  
00:02:04,739 --> 00:02:07,259  
TALK ABOUT TODAY.  
THINK SOME OF YOU WHO HAVE HEARD

34  
00:02:07,259 --> 00:02:11,610  
ME BEFORE KNOW THAT I AM BIG  
PERSON WHEN IT COMES TO TALKING

35  
00:02:11,610 --> 00:02:16,200  
ABOUT THE FIRST A IN THAT IS A.  
AND I CALL THE BIG A IN THAT IS

36  
00:02:16,200 --> 00:02:19,770  
A.  
OUR HERITAGE IS AVIATION.

37  
00:02:19,770 --> 00:02:23,080  
SOME TIMES PEOPLE FORGET THAT.  
IN THE HUB BUBB OF ALWAYS

38  
00:02:23,080 --> 00:02:26,500  
TALKING ABOUT HUMAN SPACE FLIGHT  
IN OUR INCREDIBLE SCIENCE

39  
00:02:26,500 --> 00:02:30,780  
ADVANCEMENTS, BUT WE REALLY  
WANT TO HAVE EVERYBODY FOCUS

40  
00:02:30,780 --> 00:02:35,750  
TODAY ON HEART AND SOUL OF WHAT  
NASA IS HERITAGE AND THAT'S

41  
00:02:35,750 --> 00:02:39,000  
AVIATION.  
I TRULY BELIEVE THAT 2016 GOING

42  
00:02:39,000 --> 00:02:43,970  
TO BE TREMENDOUS YEAR FOR GIANT  
LEAPS AND I SAY THIS IN TERMS OF

43  
00:02:43,970 --> 00:02:45,750  
AVIATION.  
WHICH WE ARE HERE TO DISCUSS

44  
00:02:45,750 --> 00:02:48,910  
TODAY AS WELL AS SPACE  
EXPLORATION AND OUR JOURNEY TO

45  
00:02:48,910 --> 00:02:52,140  
MARS BUT WE ARE NOT GOING TO  
TALK ABOUT THAT TODAY.

46  
00:02:52,140 --> 00:03:00,580  
I AM JOINED BY DR. JAIWON SHIN.  
AND BOY DAVID MELCHER THE CEO OF

47  
00:03:00,580 --> 00:03:03,800  
AEROSPACE INDUSTRY ASSOCIATION  
OR AIA.

48  
00:03:03,800 --> 00:03:06,760  
WE ARE HERE TODAY TO TALK ABOUT  
THAT IS A'S WORK TO MAKE FLIGHT

49  
00:03:06,760 --> 00:03:11,260  
CLEANER GREENER AND SAFER AND  
QUIET ALL WHILE DEVELOPING

50  
00:03:11,260 --> 00:03:15,970  
AIRCRAFT THAT TRAVEL FASTER AND  
BUILDING AN AVIATION SYSTEM THAT

51  
00:03:15,970 --> 00:03:19,930  
OPERATES MORE EFFICIENTLY.  
THERE IS A CERTAIN EXCITEMENT

52  
00:03:19,930 --> 00:03:25,370  
ABOUT BEING ABLE TO DISCUSS THE  
FUTURE OF FLIGHT WITH THIS

53  
00:03:25,370 --> 00:03:29,150  
WONDERFUL AIRPORT DCA AS  
BACKDROP.

54  
00:03:29,150 --> 00:03:33,069  
PEOPLE FROM ALL WALKS OF LIFE  
AND ALL CORNERS OF THE GLOBE

55  
00:03:33,069 --> 00:03:35,950  
SURROUND US AS THEY HEAD DOWN TO  
THE SECURITY GATES.

56  
00:03:35,950 --> 00:03:37,690  
AND I TOLL THEM WHEN WE WERE  
WALKING UP.

57  
00:03:37,690 --> 00:03:41,100  
SURE HOPE YOU HAVEN'T PUT US IN  
LINE WITH THE SECURITY GATES

58  
00:03:41,100 --> 00:03:44,580  
BECAUSE THE LAST THING WE WANT  
TO DO ON THIS BIG DAY IS TO HAVE

59  
00:03:44,580 --> 00:03:46,800  
PEOPLE GO WHEREVER THEY ARE  
GOING TWO COMPLAIN ABOUT THAT IS

60  
00:03:46,800 --> 00:03:49,770  
A BLOCKING TRAFFIC.  
SO, I AM GLAD TO SEE WE ARE DOWN

61  
00:03:49,770 --> 00:03:53,790  
IN A NICE SAFE CORNER.  
EVERY TIME THE FOLKS HERE WITH

62  
00:03:53,790 --> 00:03:58,560  
US TODAY TAKE OFF AND LAND THEIR  
CONTRIBUTING TO SOME 155

63  
00:03:58,560 --> 00:04:01,680  
TRILLION AND THAT'S TRILLION  
WITH A "T "FROM ECONOMIC

64  
00:04:01,680 --> 00:04:05,040  
ACTIVITIES THAT'S FUELED BY  
AMERICAN AVIATION."

65  
00:04:05,040 --> 00:04:08,800  
OF COURSE, EACH TAKE OFF AND  
LANDING REPRESENTS MORE THAN

66  
00:04:08,800 --> 00:04:12,560  
JUST DOLLAR AND CENTS.  
IT REPRESENTS FAMILIES WITH FOOD

67  
00:04:12,560 --> 00:04:16,190  
ON THE TABLE, THANKS TO THE 12  
MILLION JOBS SUPPORTED BY

68  
00:04:16,190 --> 00:04:19,639  
AMERICAN AVIATION.  
IF REPRESENTS BUSINESSES,

69  
00:04:19,639 --> 00:04:22,639  
CONNECTING WITH BUSINESSES.  
IN A WORLD THAT'S GROWING

70  
00:04:22,639 --> 00:04:27,430  
SMALLER AND SMALLER BY THE DAY.  
THANKS TO AVIEW ADDITION.

71  
00:04:27,430 --> 00:04:31,849  
IT REPRESENTS OLD FRIENDS BEING  
REUNITED AND AS GRANDPARENT,

72  
00:04:31,849 --> 00:04:35,879  
THAT MEANS GRANDPARENTS LIKE ME  
ARE ATTENDING WEDDING AFTER

73  
00:04:35,879 --> 00:04:38,949  
GRANDCHILD.  
A PATIENT WAITING ON OREGON AN

74  
00:04:38,949 --> 00:04:44,020  
ENTREPRENEUR SHIPPING OUT VERY  
FIRST BATCH OF NEW PRODUCTS.

75  
00:04:44,020 --> 00:04:47,509  
SCIENTISTS TRAVELLING TO  
COLLABORATE AND DIPLOMATS

76  
00:04:47,509 --> 00:04:50,879  
ESPECIALLY FROM THIS PLACE,  
WORKING TO BRING PEACE TO OUR

77  
00:04:50,879 --> 00:04:54,529  
TROUBLED WORLD.  
WITH SO MUCH RIDING ON THE WINGS

78  
00:04:54,529 --> 00:04:58,599  
OF OUR AIRCRAFT WE AT NASA TAKE  
OUR RESPONSIBILITY VERY

79  
00:04:58,599 --> 00:05:02,759  
SERIOUSLY.  
I AM SO PROUD OF OUR PLOYEES,

80  
00:05:02,759 --> 00:05:06,259  
CONTRACTORS AND PARTNERS, WHOSE  
WORK IS WHY WE ARE ABLE TO SAY

81  
00:05:06,259 --> 00:05:10,819  
WITH ALL SINCERITY, NASA IS WITH  
YOU WHEN YOU FLY.

82  
00:05:10,819 --> 00:05:14,029  
THEY AND THEIR PREDECESSORS ARE  
THE REASON WHY EVERY U.S.

83  
00:05:14,029 --> 00:05:18,719  
AIRCRAFT AND U.S. AIR TRAFFIC  
CONTROL TOWER HAS NASA DEVELOP

84  
00:05:18,719 --> 00:05:23,110  
TECHNOLOGY ON BOARD.  
NOW, I AM NOT ONLY ONE WHO HAS A

85  
00:05:23,110 --> 00:05:27,819  
LOT OF FAITH IN THE ABILITY OF  
THAT IS A PEOPLE.

86  
00:05:27,819 --> 00:05:31,039  
PRESIDENT BARACK OBAMA HAS MADE  
IT VERY BOLD STATEMENT ABOUT THE

87  
00:05:31,039 --> 00:05:34,719  
RESPECT AND BELIEF HE HAS IN  
THAT IS A'S WORK.

88  
00:05:34,719 --> 00:05:39,529  
THE PRESIDENT IS CALLING FOR NEW  
\$3.7 BILLION INVESTMENT IN GREEN

89  
00:05:39,529 --> 00:05:42,909  
AVIATION.  
THAT'S IN THAT IS A.

90  
00:05:42,909 --> 00:05:46,939  
\$3.7 BILLION INVESTMENT IN GREEN  
AVIATION.

91  
00:05:46,939 --> 00:05:48,629  
AND THAT'S OVER THE NEXT TEN  
YEARS.

92  
00:05:48,629 --> 00:05:53,419  
THAT'S -- THAT'S IN A VERY REAL  
SINCE IT IS ALSO AN INVESTMENT

93  
00:05:53,419 --> 00:05:55,590  
IN EACH AND EVERY ONE  
US.

94  
00:05:55,590 --> 00:05:59,770  
I WOULD ARGUE THAT EVERY  
AMERICAN POISED TO BENEFIT FROM

95  
00:05:59,770 --> 00:06:03,809  
SOME WAY IN THIS INVESTMENT.  
BECAUSE ALL OF US HAVE A STAKE

96  
00:06:03,809 --> 00:06:07,770  
IN BREATHING CLEANER AIR OR  
LIVING IN A COUNTRY WHERE MORE

97  
00:06:07,770 --> 00:06:11,639  
AND MORE OF OUR NEIGHBORS ARE  
WORKING IN STABLE WELL-PAYING

98  
00:06:11,639 --> 00:06:14,659  
JOBS.  
AS OUR CLIMATE CONTINUES TO

99  
00:06:14,659 --> 00:06:18,319  
CHANGE, WE ALL HAVE A STAKE IN  
BUILDING FUTURE WHERE WE FLY ON

100  
00:06:18,319 --> 00:06:21,900  
AIRCRAFT THAT CONSUME HALF AS  
MUCH FUEL.

101

00:06:21,900 --> 00:06:25,389

THAT GENERATE ONLY ONE QUARTER  
OF CURRENT EMISSIONS.

102

00:06:25,389 --> 00:06:29,809

AND THAT MAKE USE OF GREENER  
ENERGY SOURCES IN FIRST PLACE.

103

00:06:29,809 --> 00:06:33,309

WITH GLOBAL AIR PASSENGER  
TRAFFIC PROJECTED TO DOUBLE OVER

104

00:06:33,309 --> 00:06:37,499

THE NEXT COUPLE OF DECADES, IT  
IS BEST FOR ALL OF US THAT WE

105

00:06:37,499 --> 00:06:41,120

FIND NEW WAYS TO ABSORB BILLS  
WERE ON OF NEW PASSENGERS

106

00:06:41,120 --> 00:06:45,169

WITHOUT COMPROMISING THE SAFETY  
OF OUR SKIES.

107

00:06:45,169 --> 00:06:49,110

EVERY AMERICAN HAS A STAKE IN  
BRINGING ABOUT A FUTURE WHERE

108

00:06:49,110 --> 00:06:52,069

OUR AIRPORTS ARE BETTER  
NEIGHBORS BECAUSE AIRCRAFT

109

00:06:52,069 --> 00:06:57,969

OPERATE AS MUCH 42 DRESS BELL  
QUAIL ITER THE NOISE AIRPORTS

110

00:06:57,969 --> 00:07:05,520

LIKE DCA, IAD OR DULLE SEVEN IS  
CONTAINED WITHIN AIRPORT'S

111

00:07:05,520 --> 00:07:08,669

BOUNDARIES.

FUTURE WHERE PEOPLE CAN TRAVEL

112

00:07:08,669 --> 00:07:13,009

TO MOST CITIES IN THE WORLD IN

SIX HOURS OR LESS IN AN AIRPLANE

113

00:07:13,009 --> 00:07:17,020

THAT FLIES FASTER THAN SPEED OF

SOUND OVER LAND WITH HARDLY A

114

00:07:17,020 --> 00:07:21,189

HINT OF A SONIC BOOM.

IF ALL THIS SOUNDS LIKE SCIENCE

115

00:07:21,189 --> 00:07:26,110

FICTION, WELL, THAT'S WHY I LIKE

SAY THAT THE PEOPLE OF THAT IS A

116

00:07:26,110 --> 00:07:29,409

TURN SCIENCE FICTION INTO

SCIENCE FACT AND THAT WE MAKE

117

00:07:29,409 --> 00:07:33,059

THE IMPOSSIBLE POSSIBLE.

THE PRESIDENT'S PROPOSAL WOULD

118

00:07:33,059 --> 00:07:38,089

ALLOW TEAM NASA TO DO JUST THAT.

FROM AVIATION ENERGY EFFICIENCY

119

00:07:38,089 --> 00:07:42,300

TO TRANSFORMATION OF PRO PULL

SUN SYSTEMS TO IMPROVEMENT IN

120

00:07:42,300 --> 00:07:46,050

AVIATION MOBILITY.

IN INVESTMENT WILL ALLOWS TO

121

00:07:46,050 --> 00:07:50,539

MAKE GIANT NEW LEAPS.

I WOULD BE REMISS IF I DIDN'T

122

00:07:50,539 --> 00:07:54,199

ALSO MENTION THAT OUR

RESEARCHERS PROJECTED EVEN

123

00:07:54,199 --> 00:07:57,759

BEFORE THIS INVESTMENT THAT WE

COULD SAVE THE COMMERCIAL

124

00:07:57,759 --> 00:08:04,129

AIRLINE INDUSTRY AS MUCH AS 255

BILLION THAT'S WITH A B BILLION.

125

00:08:04,129 --> 00:08:07,300

OVER 25 YEARS.

THROUGH THE GREEN AVIATION

126

00:08:07,300 --> 00:08:10,779

TECHNOLOGIES NASA HELPING TO

DEVELOP.

127

00:08:10,779 --> 00:08:14,169

JUST THINK WHAT WE WILL BE ABLE

TO DO FOR OUR ECONOMY WITH

128

00:08:14,169 --> 00:08:17,860

ADDITIONAL RESOURCES THE

PRESIDENT HAS PROPOSED.

129

00:08:17,860 --> 00:08:21,639

WITH THIS IN MIND I WANT IT

HIGHLIGHT EXCITE THINGS THAT

130

00:08:21,639 --> 00:08:25,909

PRESIDENT'S PROPOSAL WILL ALLOW

TO PROPEL FORWARD.

131

00:08:25,909 --> 00:08:28,770

PARTNERING WITH INDUSTRY TO  
BUILD SERIES EXPERIMENTAL

132

00:08:28,770 --> 00:08:32,469

AIRCRAFT OR X PLANES LET ME TEM  
YOU ANY OF YOU HAVE KIDS IN

133

00:08:32,469 --> 00:08:37,590

COLLEGE WHO WANT TO BE ENGINEERS  
JUST OUT CURIOSITY?

134

00:08:37,590 --> 00:08:42,500

IT -- FOR JAIWON WHO GO TO  
COLLEGE AND CAMPUSES AROUND THE

135

00:08:42,500 --> 00:08:46,710

COUNTRY, THIS YEAR HAS BEEN  
INCREDIBLY REWARDING TO GO TO A

136

00:08:46,710 --> 00:08:52,250

PLACE LIKE GEORGIA TECH, OR MIT  
OR THE UNIVERSITY OF MARYLAND

137

00:08:52,250 --> 00:08:54,910

AND BE ABLE TO TELL YOUNG MAN OR  
YOUNG WOMAN THAT THEY OUGHT TO

138

00:08:54,910 --> 00:08:58,750

THINK ABOUT COMING INTO AERO  
ENGINEERING THERE DEFINITELY

139

00:08:58,750 --> 00:09:03,230

FUTURE THERE BECAUSE WE ARE  
GETTING READY DO NEW AND EXCITE

140

00:09:03,230 --> 00:09:08,570

THING WE DULY THEY WILL MORE  
MOERN RESEARCH ON THEIR CAMPUS

141

00:09:08,570 --> 00:09:12,100

THEIR PROFESSORS CAN BE INVOLVED  
IN THAT RESEARCH AND THEY HAVE

142

00:09:12,100 --> 00:09:16,010

SOMEONE TO MENTOR THEM ON REAL  
RESEARCH NOT JUST THE THEORY,

143

00:09:16,010 --> 00:09:19,890

OUT BUT ON REAL RESEARCH AND  
BUILDING AIRPLANES THAT'S WHAT I

144

00:09:19,890 --> 00:09:23,630

THINK SO EXCITING ABOUT THE  
PRESIDENT'S BUDGET AND IDEA OF

145

00:09:23,630 --> 00:09:26,470

THAT IS A GETTING BACK INTO THE  
X PLANE BUSINESS.

146

00:09:26,470 --> 00:09:30,800

ALONG THESE LINES, I HAVE AN  
EXCITING ANNOUNCEMENT TO MAKE.

147

00:09:30,800 --> 00:09:35,620

NEARLY 70 YEARS SINCE CHUCK  
BROKE SOUND BARRIER BELL X-ONE

148

00:09:35,620 --> 00:09:41,590

AS PART NACA HIGH SPEED  
RESEARCH, TODAY, NASA AWARDING

149

00:09:41,590 --> 00:09:45,900

\$20 MILLION PRELIMINARY DESIGN  
CONTRACT FOR LOW BOOM FLIGHT

150

00:09:45,900 --> 00:09:50,450

DEMONSTRATOR AIRCRAFT TO TEAM  
LED BY THE LOCKHEED MARTIN ARROW

151

00:09:50,450 --> 00:09:54,220

COMPANY IN CALIFORNIA, WHICH  
ALSO INCLUDES GE AVIATION IN

152

00:09:54,220 --> 00:09:59,320

OHIO AND TRY MODELS IN THE  
GOLDEN STATE.

153

00:09:59,320 --> 00:10:02,490

THIS FIRST X PLANE WILL BE  
CALLED QUEST.

154

00:10:02,490 --> 00:10:08,420

OR QUIET SUPER SONIC TECHNOLOGY.  
AND HERE THE MAGICAL PART.

155

00:10:08,420 --> 00:10:12,070

DESIGN IS FOR PILOTED TEST  
AIRCRAFT THAT CAN FLY AT SUPER

156

00:10:12,070 --> 00:10:17,290

SONIC SPEEDS BUT CREATE SONIC  
BOOM THAT'S MORE LIKE SOFT THUMP

157

00:10:17,290 --> 00:10:20,850

INSTEAD OF THE ANNOYING BOOM  
THAT CURRENTLY PROHIBITS

158

00:10:20,850 --> 00:10:23,890

COMMERCIAL SUPER SONIC EMPLOYED  
OVER LAND.

159

00:10:23,890 --> 00:10:30,020

IN TECHNICAL TERMS THAT'S WHAT  
THEY CALL BIG DEAL.

160

00:10:30,020 --> 00:10:34,280

SO I AM HE CAN CHRISTED AND  
PERHAPS THE BEST NEWS OF ALL IS

161

00:10:34,280 --> 00:10:38,830

THAT THIS JUST THE BEGINNING SO  
YOU KNOW WITH THAT IN MIND I AM

162

00:10:38,830 --> 00:10:42,070

GOING TO DAY OF MEL CUSTOMER AND  
JAIWON JAY TO COME ON UP AND

163

00:10:42,070 --> 00:10:45,960

HELP ME UNVEIL AN ARTIST  
RENDERING OF THE MOST -- THE LIE

164

00:10:45,960 --> 00:10:49,810

BOOM SUPERSONIC DEMONSTRATOR AND  
THEN I WILL TURN THE PODIUM OVER

165

00:10:49,810 --> 00:10:55,720

TO DR. SHIN HOP WILL GIVE YOU  
REAL DETAILS ABOUT WHAT WE ARE

166

00:10:55,720 --> 00:11:13,240

TALKING ABOUT.  
SO JAIWON AND DAVID.

167

00:11:13,240 --> 00:11:21,360

ALL RIGHT.  
THANK YOU SO MUCH CHARLIE AND I

168

00:11:21,360 --> 00:11:27,260

WANT TO ALSO ADD WELCOME -- MY  
WELCOME TO EVERYBODY WHO TOOK

169

00:11:27,260 --> 00:11:34,860

TIME OUT OF A BUSY SCHEDULE TO  
BE HERE FOR PEOPLE LIKE ME, WHO

170

00:11:34,860 --> 00:11:39,060

REALLY LOVE THE AIRPLANES THIS  
IS HOME.

171

00:11:39,060 --> 00:11:44,990

THIS IS BEAUTIFUL AIRPORT.

I AM DULY SOME AIR PLANES IN THE

172

00:11:44,990 --> 00:11:48,140

BACKGROUND.

BUT AGAIN I WANT TO THANK MY

173

00:11:48,140 --> 00:11:54,960

BOSS ADMINSTRATOR, CHARLIE

BOLDEN FOR THE AMAZING EXCITING

174

00:11:54,960 --> 00:11:59,390

REMARKS AND GOOD AFTERNOON OUR

LADIES AND GENTLEMEN.

175

00:11:59,390 --> 00:12:04,270

I WANT TO CONGRATULATE LOOK HEED

MARTIN WHO GETS AWARD AND THAT'S

176

00:12:04,270 --> 00:12:09,010

LOOK FORWARD TO WORKING WITH

LOCK EAT HAIR CONTINUE TO

177

00:12:09,010 --> 00:12:14,180

SUCCESS FOR PRELIMINARY DESIGN

OF THE WORLD'S FIRST QUIET

178

00:12:14,180 --> 00:12:18,420

SUPERSONIC X PLANE.

YOU SAW CONCEPT THERE.

179

00:12:18,420 --> 00:12:24,750

JUST IMAGINE SEVERAL YEARS DOWN

THE ROAD THAT PICTURE THERE

180

00:12:24,750 --> 00:12:29,930

STARTS FLYING OVER CHICAGO AND

IN LOS ANGELES AND THEN PEOPLE

181  
00:12:29,930 --> 00:12:34,130  
CAN HOPEFULLY PEOPLE CANNOT  
HEAR.

182  
00:12:34,130 --> 00:12:38,820  
OR DON'T EVEN KNOW THAT  
SUPERSONIC AIRPLANE JUST FLEW BY

183  
00:12:38,820 --> 00:12:41,420  
OVER THEIR HEADS.  
THAT'S THE OBJECTIVE.

184  
00:12:41,420 --> 00:12:45,190  
SO I AM HONORED AND PRIVILEGED  
TO REPRESENT THE HARD WORKING

185  
00:12:45,190 --> 00:12:50,560  
MEN AND WOMEN OF THE NASA AERO  
FAMILY AND ALSO OUR PARTNER IN

186  
00:12:50,560 --> 00:12:53,800  
INDUSTRY ACADEMIC AND  
GOVERNMENT.

187  
00:12:53,800 --> 00:12:58,410  
NASA HAS MADE SIGNIFICANT  
CONTRIBUTIONS TO AVIATION, AND

188  
00:12:58,410 --> 00:13:02,680  
AS YOU CAN SEE OUT OF THE  
WINDOW, I AM GLAD THAT ALL OF

189  
00:13:02,680 --> 00:13:06,390  
THE AIRPLANES ARE OUT THERE  
ACTUALLY HAVE WING LET'S ARE

190  
00:13:06,390 --> 00:13:12,950  
SMALL -- AT THE TIP  
THE WING THAT REDUCED THE DRAG

191  
00:13:12,950 --> 00:13:18,640  
AND SAVE THE FUEL.  
THAT WINGLET CAME FROM NASA.

192  
00:13:18,640 --> 00:13:23,900  
MANY YEARS AGO.  
THAT'S ONE VERIBLE EX NASA

193  
00:13:23,900 --> 00:13:31,810  
CONTRIBUTION AND IN 2013, THEY  
ANNOUNCED OUR NEW AND EXCITING

194  
00:13:31,810 --> 00:13:39,120  
VISION AND STRATEGY FOR NASA  
AERO TO ENSURE THE NEXT HUNDRED

195  
00:13:39,120 --> 00:13:43,290  
YEARS OF RESEARCH EXCELLENCE AS  
WE HAVE BEEN DOING FOR THE PAST

196  
00:13:43,290 --> 00:13:47,420  
100 YEARS OF FROM NACA DAYS  
THROUGH NASA.

197  
00:13:47,420 --> 00:13:51,720  
AS WELL AS HELP MAINTAIN U.S.  
GLOBAL LEADERSHIP IN AIR

198  
00:13:51,720 --> 00:13:55,370  
AEROSPACE INDUSTRY IN FACE OF  
GROWING INTERNATIONAL

199  
00:13:55,370 --> 00:14:00,180  
COMPETITION AND SUPPORT AVIATION  
KEY ROLE IN OUR NATION'S

200  
00:14:00,180 --> 00:14:05,650  
ECONOMY.  
AS BOLD STATEMENT IN EXPANDING

201  
00:14:05,650 --> 00:14:10,840  
THE VISION PRESIDENT REQUESTED  
\$10.6 BILLION OVER NEXT TEN

202  
00:14:10,840 --> 00:14:17,780  
YEARS FOR NASA AND THAT'S --  
THAT'S \$3.7 BILLION INCREASE

203  
00:14:17,780 --> 00:14:23,160  
THAT CHARLIE MENTIONED AND  
STARTING WITH SEVERAL -- SO, I

204  
00:14:23,160 --> 00:14:29,190  
WILL SAY, WE ARE AT THE RIGHT  
PLACE AT THE RIGHT TIME WITH THE

205  
00:14:29,190 --> 00:14:32,590  
RIGHT TECHNOLOGY.  
THIS TEN YEAR BUDGET PLAN WILL

206  
00:14:32,590 --> 00:14:38,620  
ALLOW US TO TRANSFORM AVIATION  
TO ACHIEVE REVOLUTIONARY

207  
00:14:38,620 --> 00:14:42,740  
BREAKTHROUGHS IN AIRCRAFT AND  
ALSO AIR TRAFFIC MANAGEMENT

208  
00:14:42,740 --> 00:14:47,670  
TECHNOLOGIES, AND IMPROVE OUR  
AVIATION EFFICIENCY AND SAFETY

209  
00:14:47,670 --> 00:14:50,790  
WHILE AT THE SAME TIME  
DRAMATICALLY REDUCING FUEL

210  
00:14:50,790 --> 00:14:55,060  
CONSUMPTION EMISSIONS AND NOISE  
WITH THIS FULL SUPPORT WE WILL

211  
00:14:55,060 --> 00:15:00,480  
BE ABLE TO DEVELOP AND  
DEMONSTRATE IN FLIGHT WIDE RANGE

212  
00:15:00,480 --> 00:15:05,960  
OF ADVANCED TECHNOLOGIES THROUGH  
A SERIES OF X PLANES, AS WE ARE

213  
00:15:05,960 --> 00:15:11,240  
CALLING ON AVIEW ADDITION MORE  
REDONE AND IN THIS QUEST IS TO

214  
00:15:11,240 --> 00:15:16,230  
ONE OF THE -- THOSE X PLANES WE  
WOULD LIKE TO DESIGN AND BUILD.

215  
00:15:16,230 --> 00:15:21,040  
AND FLY.  
ONCE WE LEARN FROM QUEST, WE CAN

216  
00:15:21,040 --> 00:15:25,290  
INFLUENCE CHANGING THE CURRENT  
REGULATION THAT BAN SUPER --

217  
00:15:25,290 --> 00:15:29,690  
SUPERSONIC COMMERCIAL SUPERSONIC  
FLIGHT OVER THE LAND, THAT IS

218  
00:15:29,690 --> 00:15:34,240  
VERY STRICT REGULATION  
INTERNATIONAL STANDARD AND WE

219  
00:15:34,240 --> 00:15:39,160  
LIKE TO HELP U.S. INDUSTRY OPEN  
UP AN ENTIRELY NEW MARKET THAT

220  
00:15:39,160 --> 00:15:42,450  
COULD MEAN ADDITIONAL  
HIGH-PAYING AND HIGH QUALITY

221

00:15:42,450 --> 00:15:46,350

JOBS.

AND THEN THERE WOULD BE SERIES

222

00:15:46,350 --> 00:15:49,770

DEMONSTRATORS THAT WILL LOOK  
VERY UNCONVENTIONAL AS YOU CAN

223

00:15:49,770 --> 00:15:56,590

SEE SOME OF THE DESKTOP MODELS  
AND A MODEL HERE IF YOU HAVE --

224

00:15:56,590 --> 00:16:00,960

HAVE NOT SEEN THIS KIND OF  
AIRPLANE, JUST GIVE US CALL.

225

00:16:00,960 --> 00:16:03,760

I LIKE TO GET ON THOSE AIRPLANES  
NOW.

226

00:16:03,760 --> 00:16:08,130

BUT THESE ARE OUR CONCEPT  
AIRPLANES, THAT WE HAVE BEEN

227

00:16:08,130 --> 00:16:12,730

WORKING ON MANY YEARS, SO AS YOU  
CAN SEE THAT THERE THIS COMPLETE

228

00:16:12,730 --> 00:16:18,540

DEPARTURE FROM CONVENTIONAL  
AIRCRAFT SHAPE.

229

00:16:18,540 --> 00:16:22,570

SO WE -- WHAT WE LEARNED FROM  
THESE DEMONSTRATORS WE CAN

230

00:16:22,570 --> 00:16:26,970

ACHIEVE A FUTURE WHERE  
COMMERCIAL FLIGHT USES ONLY HALF

231

00:16:26,970 --> 00:16:33,490

OF THE FUEL THAT -- STATE OF THE  
ART AIRCRAFT USES NOW AND ALSO,

232

00:16:33,490 --> 00:16:38,920

QUARTER OF NITRO OBJECTION CRIED  
COMPARED WITH TODAY'S STATE OF

233

00:16:38,920 --> 00:16:43,300

THE ART COMMERCIAL AIRPLANES.  
AND VERY IMPORTANTLY FOR LOCAL

234

00:16:43,300 --> 00:16:48,029

COMMUNITIES, THIS KIND OF  
TECHNOLOGY WILL KEEP -- WILL

235

00:16:48,029 --> 00:16:51,680

TAKE OFF AND LANDING NOISE WELL  
WITHIN THE BOUNDARY OF THE

236

00:16:51,680 --> 00:16:53,980

AIRPORT.  
WE WILL CONTINUE ARE LEARNING

237

00:16:53,980 --> 00:16:59,060

MORE ABOUT THE BENEFITS OF USING  
ALTERNATIVE JET FUEL OR ENGINE

238

00:16:59,060 --> 00:17:02,740

COME BUSTERS THAT OPERATE ON  
MORE THAN ONE TYPE

239

00:17:02,740 --> 00:17:08,040

FUEL.  
ANY KIND OF THE FUELS OR

240

00:17:08,040 --> 00:17:12,410

AIRCRAFT THAT ARE POWERED BY  
HYBRID ELECTRIC SYSTEMS.

241

00:17:12,410 --> 00:17:18,260

I LIKE TO USE THIS ANALOGY.

YOU LOOK OUT OF THE WINDOW, THAT

242

00:17:18,260 --> 00:17:25,240

MARVELOUS MODERN ENGINEERING

WONDER WE CALL AN AIRPLANE WITH

243

00:17:25,240 --> 00:17:30,650

NEW AVIATION HORIZON X PLANES,

WE WILL FREE THE BEAUTIFUL

244

00:17:30,650 --> 00:17:35,170

BUTTERFLY STUCK IN THAT

CONFIGURATION AND WE WILL FREE

245

00:17:35,170 --> 00:17:41,840

BUTTERFLIES TO FLY.

CLEANER SAFER AND FASTER.

246

00:17:41,840 --> 00:17:46,309

WE WILL BE ABLE TO BE ACHIEVE

THE FULL FOE SHAEJS

247

00:17:46,309 --> 00:17:50,130

REVOLUTIONARY TECHNOLOGIES AND

DESIGNS THAT LIFT AVIATION TO

248

00:17:50,130 --> 00:17:56,100

THE NEXT LEVEL OF FLYING GREEN,

SAFER QUIETER AND FASTER.

249

00:17:56,100 --> 00:18:00,010

WE WILL UP THE GAME TO

COMPLETELY NEW LEVEL.

250

00:18:00,010 --> 00:18:04,790

I MENTIONED AT THE BEGINNING OF

MY REMARKS THERE IS VERY

251

00:18:04,790 --> 00:18:09,400

POWERFUL HUMAN ELEMENT IN THIS  
AMBITIOUS TEN YEARS OF PLAN AS

252

00:18:09,400 --> 00:18:12,320

WELL.  
CHARLIE ALSO MENTIONED JUST

253

00:18:12,320 --> 00:18:18,090

IMAGINE HOW MUCH INSPIRATION WE  
CAN BRING TO NEXT GENERATION OF

254

00:18:18,090 --> 00:18:22,490

INCH NOOERZ AND SCIENTISTS, AS  
THEY WATCH THESE VERY

255

00:18:22,490 --> 00:18:27,340

UNCONVENTIONAL LOOKING X PLANES  
FLYING AROUND THE COUNTRY.

256

00:18:27,340 --> 00:18:31,000

IN ADDITION TO NEW AVIATION  
HORIZONS THE TEN YEAR INVESTMENT

257

00:18:31,000 --> 00:18:39,580

ALSO WILL EXPAND OUR ABILITY  
TO -- MANAGEMENT THAT BE

258

00:18:39,580 --> 00:18:43,790

ACCOMMODATING -- THAT  
ACCOMODATES GROWING DEMANDS AND

259

00:18:43,790 --> 00:18:49,840

GROWING VARIETY OF AIRCRAFT.  
NOW IN CLOSING, THIS OPPORTUNITY

260

00:18:49,840 --> 00:18:56,230

DIDN'T HAVE HAPPEN OVERNIGHT.  
WE ARE AT THIS POINT TODAY

261  
00:18:56,230 --> 00:19:00,270  
BECAUSE WE HAVE MADE SIGNIFICANT  
TECHNICAL PROGRESS SINCE 2008

262  
00:19:00,270 --> 00:19:04,220  
TIME FRAME.  
BUT BOLDEN MENTIONED THAT

263  
00:19:04,220 --> 00:19:10,210  
COMMERCIAL AIRLINES COULD SAVE  
\$200 BILLION BE IN FUEL

264  
00:19:10,210 --> 00:19:16,100  
CONSUMPTION.  
THAT'S ONE CLEAR EXAMPLE OF THAT

265  
00:19:16,100 --> 00:19:19,720  
IS A'S GREEN AVIATION  
TECHNOLOGIES THAT WE HAVE WORKED

266  
00:19:19,720 --> 00:19:24,970  
TO BENEFIT OUR NATION'S AVIATION  
INDUSTRY AND NATIONAL ECONOMY.

267  
00:19:24,970 --> 00:19:29,460  
THIS KIND OF RESEARCH RESULT IS  
A GREAT EXAMPLE OF WHAT CAN BE

268  
00:19:29,460 --> 00:19:34,809  
DONE WHEN A ROBUST CAPITAL  
INVESTMENT COMBINED WITH A

269  
00:19:34,809 --> 00:19:38,180  
COLLABORATION PUBLIC PRIVATE  
PARTNERSHIP AND THAT'S WHY I AM

270  
00:19:38,180 --> 00:19:42,770  
VERY THANKFUL THAT I SEE MANY  
COLLEAGUES AND FRIENDS FROM OUR

271  
00:19:42,770 --> 00:19:46,140  
INDUSTRY PARTNERS, PRESENT HERE  
TODAY.

272  
00:19:46,140 --> 00:19:50,460  
BECAUSE WE COULD NOT HAVE DONE  
THIS AMAZING ADVANCES OF

273  
00:19:50,460 --> 00:19:55,330  
TECHNOLOGY WITHOUT INDUSTRY  
PARTNERS.

274  
00:19:55,330 --> 00:20:02,610  
SO THIS IS OUR -- NASA AERO IS  
READY AND ABLE TO TAKE ON THIS

275  
00:20:02,610 --> 00:20:06,110  
EXCITING CHALLENGE ON BEHALF OF  
THE NATION AND THE FLYING

276  
00:20:06,110 --> 00:20:09,910  
PUBLIC.  
WE ARE INDEED AT THE RIGHT PLACE

277  
00:20:09,910 --> 00:20:13,030  
AT THE RIGHT TIME WITH THE RIGHT  
TECHNOLOGY.

278  
00:20:13,030 --> 00:20:16,790  
SO AS I MENTIONED PUBLIC PRIVATE  
PARTNERSHIP IS ESSENTIAL PART OF

279  
00:20:16,790 --> 00:20:20,990  
OUR SUCCESS.  
SO I AM VERY PLEASED THAT

280  
00:20:20,990 --> 00:20:26,530  
MR. DAVID MELCHER PRESIDENT AND  
CEO OF AVIATION INDUSTRY DRUSZ

281

00:20:26,530 --> 00:20:35,720

ASSOCIATION IS PRESENT WITH US.  
SO MR. MELCHER?

282

00:20:35,720 --> 00:20:41,100

WENT FIRST WAIT SAY THANK YOU TO  
MR. BOLDER AND DR. SHIN FOR

283

00:20:41,100 --> 00:20:45,679

HAVING ME HERE TODAY THERE. IS  
A LOT TO BE EXCITED ABOUT TODAY.

284

00:20:45,679 --> 00:20:49,330

NOT ONLY IN IDEAS THAW HAVE BEEN  
PRESENTED, BUT IN THE POTENTIAL

285

00:20:49,330 --> 00:20:53,520

THEY REPRESENT FOR THE FUTURE.  
AND LADIES AND GENTLEMEN, I

286

00:20:53,520 --> 00:20:56,679

REPRESENT AS WAS MENTIONED  
AEROSPACE INDUSTRY ASSOCIATION

287

00:20:56,679 --> 00:21:01,040

WHICH HAS BEEN AROUND 100 YEARS  
IN 2019.

288

00:21:01,040 --> 00:21:04,960

AND WAS FORMED BY ORVILLE WRIGHT  
AND GLENN CURTIS AND REPRESENTS

289

00:21:04,960 --> 00:21:08,260

ABOUT 300-PLUS AEROSPACE AND  
DEFENCE COMPANIES.

290

00:21:08,260 --> 00:21:13,470

DIE LIGHTED TO BE HERE IN ORDER  
TO SUPPORT THE NEW TEN YEAR PLAN

291

00:21:13,470 --> 00:21:16,460

TO SIGNIFICANTLY BOOST NATIONAL  
INVESTMENTS IN CUTTING-EDGE

292

00:21:16,460 --> 00:21:19,640

TECHNOLOGIES WHICH YOU HAVE  
HEARD A BIT ABOUT AND AERO

293

00:21:19,640 --> 00:21:23,830

RESEARCH IT IS CHARLIE SAID AND  
OFTEN WANT ON TO SAY THIS IS A

294

00:21:23,830 --> 00:21:25,720

BIG DEAL.  
AND WE OUGHT TO REALLY CARE

295

00:21:25,720 --> 00:21:28,790

ABOUT IT.  
YOU SHOULD MAKE NO MISTAKE ABOUT

296

00:21:28,790 --> 00:21:32,059

IT WHEN COMES EXAMPLES OF PUBLIC  
INVESTMENTS THAT SETS GOLD

297

00:21:32,059 --> 00:21:36,240

STANDARD STORE PERFORMANCE AND  
PUBLIC BENEFITS, NASA AIR E

298

00:21:36,240 --> 00:21:40,730

RESEARCH IN TOPS THAT LIST.  
IF MAKES TREMENDOUS SENSE TO

299

00:21:40,730 --> 00:21:44,400

CONTINUE MAKING SMART  
INVESTMENTS THROUGH THAT SASHGS

300

00:21:44,400 --> 00:21:47,000

IN AN AVIEW ADDITION SAFETY AND  
MOBILITY.

301

00:21:47,000 --> 00:21:51,270

ENERGY ADVANCED PRO YOU WILL P  
SHUN STRAPS FORMATION.

302

00:21:51,270 --> 00:21:54,650

THIS BUDGET WILL ALLOW THOSE  
KINDS OF FLINT TO BE MADE.

303

00:21:54,650 --> 00:21:58,640

WILL MAKE OUR COUNTRY BETTER.  
BETTER FOR TECHNOLOGY, AND

304

00:21:58,640 --> 00:22:01,120

BETTER FOR INDUSTRY.  
AND BETTER FOR THE FLYING PUBLIC

305

00:22:01,120 --> 00:22:04,550

THAT WE SEE AROUND US.  
WE HAVE TREMENDOUS AVIATION

306

00:22:04,550 --> 00:22:07,600

INFRASTRUCTURE TODAY.  
BUT DEMAND FOR AVIEW ADDITION

307

00:22:07,600 --> 00:22:11,220

SERVICE CONTINUES TO GROW.  
ONE ESTIMATE ALONE ESTIMATED

308

00:22:11,220 --> 00:22:14,140

NEAR DOUBLING IN AMOUNT OF  
PASSENGERS THAT ARE TRAVELLING

309

00:22:14,140 --> 00:22:19,460

BETWEEN NOW AND 2034.  
UP TO 7 BILLION WORLD WIDE.

310

00:22:19,460 --> 00:22:22,780

AND SO, I THINK IT IS REALLY  
INCUMBENT UPON NASA THAT'S ALL

311

00:22:22,780 --> 00:22:26,820

BEEN PARTNER A VEINS AVIATION  
TECHNOLOGIES, TO BE AN IMPORTANT

312

00:22:26,820 --> 00:22:30,950

PART OF THAT FUTURE.  
THROUGHOUT NASA'S HISTORY AND

313

00:22:30,950 --> 00:22:37,070

ITS ORGANIZATION FOUNDED 100  
YEARS AGO, THE NATIONAL ADVICE

314

00:22:37,070 --> 00:22:40,960

RECOMMITTEE FOR AERO THE  
GOVERNMENT HAS PERFORMED A VITAL

315

00:22:40,960 --> 00:22:44,760

ROLE IN ADVANCING PROGRESS ON  
WILL COMPLEX ISSUES, LIKE WIND

316

00:22:44,760 --> 00:22:48,870

SHEAR ICING, ELECTRONIC CONTROLS  
AND COCKPITS.

317

00:22:48,870 --> 00:22:52,520

AND BRINGING UNMANNED AIRCRAFT  
SYSTEMS INTO THE AIRSPACE.

318

00:22:52,520 --> 00:22:56,900

YOU NAME IT, NASA WAS AND IS  
INTREGAL TO THE TECHNOLOGIES

319

00:22:56,900 --> 00:23:00,210

THAT ADVANCED IN EACH ONE  
THESE AREAS AND TO CONQUER

320

00:23:00,210 --> 00:23:05,050

COMPLEX AND PROBLEMATIC ISSUES.  
THIS RESEARCH HANN HAS NOT BEEN

321

00:23:05,050 --> 00:23:09,059

DONE ALONE BUT DONE ACTIVE  
SUPPORT AND FINANCIAL COMMITMENT

322

00:23:09,059 --> 00:23:14,130

FROM INDUSTRY, AND HAS BENEFIT  
ENTIRE AVIATION COMMUNITY.

323

00:23:14,130 --> 00:23:17,540

THROUGH NASA EXCITING NEW  
AVIATION HORIZON SHAH TIFT

324

00:23:17,540 --> 00:23:21,050

AGENCY THAT PIONEERED PIPER/16  
ON FLIGHT WILL HELP AIM

325

00:23:21,050 --> 00:23:27,059

REVOLUTIONARY CHANGES IN THE WAY  
BEAM FLY AROUND THE WORLD.

326

00:23:27,059 --> 00:23:30,000

ONE OF OUR ASSOCIATION'S GREAT  
MEMBER COMPANIES ABOUT OEKING

327

00:23:30,000 --> 00:23:37,730

HAS TESTIFY I TER RIFF ADVISE  
MEANT THAT ENVISION PASSENGER

328

00:23:37,730 --> 00:23:40,820

SIR COUPLE NAVIGATING GLOBE TWO  
HOURS.

329

00:23:40,820 --> 00:23:43,760

WITH A STRONG COMMITMENT TO THIS  
TYPE RESEARCH GOING FORWARD, I

330

00:23:43,760 --> 00:23:47,480

THINK IT IS ONLY A QUESTION OF  
HOW SOON NOT WHETHER THIS WHOLED

331

00:23:47,480 --> 00:23:50,880

VISION CAN BE ACLEVED.

AND I JOIN ALSO IN

332

00:23:50,880 --> 00:23:55,220

CONGRATULATING LOCKHEED MARTIN

AND GE AVIATION FOR ACCOUNT HERE

333

00:23:55,220 --> 00:24:00,130

TO ADVANCE THE YOU KNOW LOW

BOORJS SUPER SONIC FLIGHT

334

00:24:00,130 --> 00:24:02,540

BECAUSE I THINK THAT'S ALSO

GREAT ACCOMPLISH COMMENT WILL BE

335

00:24:02,540 --> 00:24:06,850

GREAT CONTRIBUTOR TO OUR

NATION'S COMMERCE GOING FORWARD.

336

00:24:06,850 --> 00:24:11,850

SO NASA TEN YEAR PLAN BUILD UPON

THIS GREAT WORK IT WILL CONTINUE

337

00:24:11,850 --> 00:24:15,350

TO HAVE KIND EFFORTS THIS NATION

OUGHT TO CONTINUE.

338

00:24:15,350 --> 00:24:18,410

AND YOU KNOW I ALWAYS BELIEVE IN

THE POWER OF IDEAS.

339

00:24:18,410 --> 00:24:22,150

AND BUDGETS, FOLLOW SOMETIMES

POWER OF IDEAS.

340

00:24:22,150 --> 00:24:25,370

THESE ARE POWERFUL IDEAS THAT

BENEFIT NOT ONLY THE FLYING

341

00:24:25,370 --> 00:24:30,040

PUBLIC BUT ALL RIGHT TECHNOLOGY  
THAT ONE WOULD EXPECT FROM AND

342

00:24:30,040 --> 00:24:33,780

CHILDREN AMERICAN INDUSTRY.  
AND SO, I LEND MY FULL SUPPORT

343

00:24:33,780 --> 00:24:35,380

TO THIS.  
OUR MEMBER COMPANIES WILL LEND

344

00:24:35,380 --> 00:24:38,610

THEIR FULL SORT THIS.  
AND I THINK THAT THIS SOMETHING

345

00:24:38,610 --> 00:24:41,650

THAT HOPEFULLY THOSE OF YOU IN  
ATTENDANCE AND KNOWS ON CAPITOL

346

00:24:41,650 --> 00:24:44,250

HILL WILL ALSO REALIZE IT IS  
VERY IMPORTANT TO OUR FLYING

347

00:24:44,250 --> 00:24:47,680

FUTURE THANK YOU FOR ALLOWING ME  
TO BE HERE TODAY.

348

00:24:47,680 --> 00:24:54,429

>> FLANK YOU DAVID WE WILL OPEN  
UP THE QUESTION-AND-ANSWER

349

00:24:54,429 --> 00:24:57,150

SESSION RIGHT NOW WE HAVE  
MICROPHONE NEITHER CENTER OF THE

350

00:24:57,150 --> 00:24:58,720

ROOM.  
WE WOULD LIKE PLEAD YEAH

351

00:24:58,720 --> 00:25:00,650

REPORTER STEP UP IN ORDERLY  
FASHION.

352

00:25:00,650 --> 00:25:03,400

IDENTIFY THEMSELVES THEIR  
IMMEDIATE AFFILIATION.

353

00:25:03,400 --> 00:25:07,770

IF THEY COULD, TAYLOR THEIR  
QUESTION TO SPECIFIC BMMIST SO

354

00:25:07,770 --> 00:25:10,120

WE KNOW WHO THEY ARE TALKING --  
ASKING THE QUESTION OF.

355

00:25:10,120 --> 00:25:15,590

WITH THAT WE WILL GET STARTED.  
>> HI THIS IS ERIK DISCOVERY

356

00:25:15,590 --> 00:25:17,600

NEWS.  
I LOVE AIR PLANES AND THIS

357

00:25:17,600 --> 00:25:19,460

WONDERFUL.  
IT IS SOMETHING OUT OF JOHNNY

358

00:25:19,460 --> 00:25:23,710

QUEST WHAT I AM CURVOUS ABOUT  
HOW FLYING PUBLIC GOING TO

359

00:25:23,710 --> 00:25:27,530

BENEFIT HERE?  
FLYING IS NOT A LOT OF FUN.

360

00:25:27,530 --> 00:25:30,510

IT IS CRAMPED.  
TIRED, IT IS REALLY CHALLENGE

361

00:25:30,510 --> 00:25:34,410

FOR LOT OF PASSENGERS.

SO GRANTED AIRLINE INDUSTRY

362

00:25:34,410 --> 00:25:37,590

GOING TO SAVE A LOT OF MONEY GET

FLY FASTER BUT MOW IS THE PUBLIC

363

00:25:37,590 --> 00:25:40,309

GOING TO BENEFIT HERE

>> I THINK IF I GIVE YOU EXAMPLE

364

00:25:40,309 --> 00:25:45,770

OF 787, YOU KNOW, IT IS

POTENTIAL HE NOT AS CRAMPED AT

365

00:25:45,770 --> 00:25:49,890

MOST OTHER AIRPLANES THE BIGGEST

BENEFIT YOU GET ALL COMPOSITE

366

00:25:49,890 --> 00:25:54,309

AIR FRAME WHICH ALLOWS YOU TO --

AIRLINE COMPANIES TO PUT MORE

367

00:25:54,309 --> 00:25:57,760

OXYGEN AND MORE AIR INTO THE

COCKPIT SO MOST PEOPLE WHO FLY

368

00:25:57,760 --> 00:26:02,880

ON 787 RECOGNIZE THE FACT THEY

ARE A LITTLE BIT MORE RENTED

369

00:26:02,880 --> 00:26:05,350

WHEN THEY GET TO THEIR

DESTINATION AS A RESULT OF

370

00:26:05,350 --> 00:26:09,650

HAVING FLOWN AT LITTLE BIT YOU

KNOW LOWER ALTITUDE, AND IN

371

00:26:09,650 --> 00:26:12,070

COCKPIT.

AND ALSO WITH MORE OXYGEN.

372

00:26:12,070 --> 00:26:16,890

I THINK THOSE KINDS OF THINGS

THAT WE WERE BRINGING TO FLYING

373

00:26:16,890 --> 00:26:20,870

PUBLIC SAFE FLIGHT, FASTER

FLIGHT CLEAN OR MORE EFFICIENT

374

00:26:20,870 --> 00:26:24,110

FLIGHT, SO THAT IT MAKES IT

EASIER FOR THEM TO GET WHERE

375

00:26:24,110 --> 00:26:27,080

THEY WANT TO GO A LOT QUICKER

AND THEY HAVE LESS TIME TO WORRY

376

00:26:27,080 --> 00:26:32,750

ABOUT BEING CRAMPED.

>> CHRISTIE WATSON U.S. AMOUNT

377

00:26:32,750 --> 00:26:36,340

TODAY FOR ADMINSTRATOR FIRST.

WHAT HAPPENS IF CONGRESS DOES

378

00:26:36,340 --> 00:26:40,410

NOT ALLOCATE YOU THE MONEY FOR

THIS PARTICULAR LINE ITEM?

379

00:26:40,410 --> 00:26:43,360

CAN YOU CARRY FORWARD?

AND WHAT KIND OF SOUNDS

380

00:26:43,360 --> 00:26:47,070

REDUCTION WILL YOU ACHIEVE ON

THE GROUND WITH IN PLANE?

381

00:26:47,070 --> 00:26:50,390

>> LET ME JUST GIVE YOU ONE FLEX  
AND IT IS THE WAY OUR GOVERNMENT

382

00:26:50,390 --> 00:26:52,559

WORKS.  
YOU POSED THE GREAT QUESTION AND

383

00:26:52,559 --> 00:26:55,740

REASON THAT WE HAVE BEEN WORKING  
DILIGENTLY WITH THE CONGRESS

384

00:26:55,740 --> 00:26:57,820

SINCE WE ROLLED OUT PRESIDENT'S  
BUDGET.

385

00:26:57,820 --> 00:27:01,960

I THINK EVERYBODY KNOWS THE  
SAYING PRESIDENT PROPOSES AND

386

00:27:01,960 --> 00:27:07,470

CONGRESS DISPOSES.  
AS DAY SAID AND HIS REMARKS IT

387

00:27:07,470 --> 00:27:11,600

IS NOW UP TO THE CONGRESS TO SEE  
THE WISDOM OF WHAT WE HAVE

388

00:27:11,600 --> 00:27:13,620

PROPOSED.  
AND TO SEE THE BENEFITS THAT

389

00:27:13,620 --> 00:27:17,030

THIS WILL BRING TO THE FLYING  
PUBLIC, TO AMERICAN INDUSTRY, TO

390

00:27:17,030 --> 00:27:20,730

THE ECONOMY, JUST TO THE  
SECURITY OF AMERICAN CITIZENS

391

00:27:20,730 --> 00:27:23,850

BECAUSE, MORE AND BETTER JOBS  
ARE AVAILABLE.

392

00:27:23,850 --> 00:27:26,929

SO THAT'S THE KEY PART THE KEY  
MESSAGE WE ARE HOPING THAT YOU

393

00:27:26,929 --> 00:27:29,350

ALL WILL HELP US TO GET TO THE  
CONGRESS.

394

00:27:29,350 --> 00:27:36,840

IN TERMS OF WHAT WE SEE AS  
LEVEL -- THE AMOUNT OF BOOM WE

395

00:27:36,840 --> 00:27:40,669

HOPE TO WILL NO BOOM BUT RUMBLE.  
I AM GOING TO SEE IF JAIWON OR

396

00:27:40,669 --> 00:27:43,370

SOMEONE ELSE WANT TO TRY TO GIVE  
YOU SOMETHING.

397

00:27:43,370 --> 00:27:47,160

I THINK THE SHORT ANSWER IS  
THAT'S WHY WE ARE BUILDING

398

00:27:47,160 --> 00:27:49,350

ADMINSTRATOR.  
YOU THEORY SAYS ONE THING WE

399

00:27:49,350 --> 00:27:52,510

WANT ON TO SEE IF REALLY WORKS  
THAT WAY.

400

00:27:52,510 --> 00:27:54,990

>> I THINK THAT'S REALLY GOOD  
POINT CHARLIE.

401

00:27:54,990 --> 00:27:59,450

I WANT TO ADD COUNSEL OTHER  
POINTS, THESE ARE CONSENT

402

00:27:59,450 --> 00:28:03,360

FREIGHTING ON X PLANE FOR THE  
PURPOSE OF THIS PRESS

403

00:28:03,360 --> 00:28:06,610

CONFERENCE.  
BUT WE HAVE BEEN WORKING ON ALSO

404

00:28:06,610 --> 00:28:10,429

LOT OF AIR TRAFFIC MANAGEMENT  
AND SAFETY TECHNOLOGY AS AN

405

00:28:10,429 --> 00:28:15,590

EXAMPLE WE HAVE BEEN WORKING  
WITH AMERICAN AIRLINES AND MANY

406

00:28:15,590 --> 00:28:22,630

OTHER PARTNERS CLOSELY WITH FAA  
TO IMPROVE SURFACE MANAGEMENT

407

00:28:22,630 --> 00:28:28,190

AND MORE EFFICIENT TAKE OFF AND  
LAND PROCESSES.

408

00:28:28,190 --> 00:28:31,390

AROUND THE VERIY HEAVY BUSY  
TERMINAL AREAS.

409

00:28:31,390 --> 00:28:34,840

SO ALL YOUR ASK ABOUT THE  
BENEFITS TO PUBLIC.

410

00:28:34,840 --> 00:28:38,970

FLYING PUBLIC, THAT TYPE  
RESEARCH AND TECHNOLOGY

411

00:28:38,970 --> 00:28:43,549

TRANSFERS TO AIRPORTS AND  
AIRLINES WE WILL BE ABLE TO

412

00:28:43,549 --> 00:28:50,419

CERTAINLY HELP ON TIME DEPARTURE  
AND ALSO REDUCE DELAYS AND --

413

00:28:50,419 --> 00:28:54,919

YOU GOT TO AIRPORT 20 OPINIONS  
EARLIER YOUR GATE NOT OPEN.

414

00:28:54,919 --> 00:28:57,640

SO YOU HAVE TO SIT ON TARMAC FOR  
20 MINUTES.

415

00:28:57,640 --> 00:29:02,340

WE WILL ELIMINATE KNOWS  
CUMBERSOME PRACTICES.

416

00:29:02,340 --> 00:29:06,190

SO THAT'S ONE OTHER PART OF OUR  
AERO RESEARCH OF AND WITH THIS

417

00:29:06,190 --> 00:29:09,770

FUNDING INCREASE WE WILL BE ABLE  
TO BE ACCELERATE THAT KINDCHED

418

00:29:09,770 --> 00:29:15,040

RESEARCH AS WELL.  
AND IN TERMS OF AIRCRAFT IN YOU

419

00:29:15,040 --> 00:29:19,559

REALLY THINK ABOUT IN AGAIN,  
BRINGING THAT BUTTERFLY OUT OF

420

00:29:19,559 --> 00:29:24,049

THE COCOON, AND THEN IT IS  
PROVIDES A LOT OF FLEXIBILITY

421

00:29:24,049 --> 00:29:28,400

FOR AIRCRAFT DESIGNERS IN  
SEATING ARRANGEMENTS AND NUMBER

422

00:29:28,400 --> 00:29:33,890

OFFICE HOW TO DESIGN THE CABIN  
SO THINK ALL IN ALL, THAT

423

00:29:33,890 --> 00:29:39,960

CHARLIE TALK ABOUT LOW OXYGEN  
PUMPED INTO FUSELAGE TODAY IN

424

00:29:39,960 --> 00:29:44,669

787S THAT'S IMMEDIATE BEEN FIT  
FROM COMPOSITE RESEARCH THAT

425

00:29:44,669 --> 00:29:48,690

NASA HAS COLLABORATED WITH THE  
INDUSTRIES.

426

00:29:48,690 --> 00:29:52,330

NEXT STAGE OF OPENING UP THIS  
CONFIGURATION CONSTRAINT, WE

427

00:29:52,330 --> 00:29:57,080

BELIEVE WILL BE -- WE BELIEVE WE  
WILL MAKE FLIGHTS A LOT MORE

428

00:29:57,080 --> 00:30:00,410

ENJOYABLE AND BECAUSE WE CAN  
PROVIDE THAT FLEXIBILITY AND

429

00:30:00,410 --> 00:30:07,290

VERSATILITY FOR DESIGNS.  
IN ALL SENSE I THINK WE CAN BROW

430

00:30:07,290 --> 00:30:14,570

VOID A LOT MORE BENEFIT TO THE  
FLYING PUBLIC.

431

00:30:14,570 --> 00:30:19,990

>>

>> HELLO.

432

00:30:19,990 --> 00:30:23,210

YOU EXPLAIN A LITTLE BIT MORE  
ABOUT HOW YOU ARRIVED AT THIS

433

00:30:23,210 --> 00:30:28,580

PARTICULAR CONCEPT AND CONTRACT?  
WAS THERE A COMPETITION?

434

00:30:28,580 --> 00:30:31,460

IS THIS OUTGROWTH WORK YOU  
ALREADY BEEN DOING WITH

435

00:30:31,460 --> 00:30:34,470

LOCKHEED?  
WHAT KINDS OF NEXT STEP AFTER

436

00:30:34,470 --> 00:30:37,710

THEY DO THE PRELIMINARY DESIGN?  
ARE THERE OPTIONS FOR AN

437

00:30:37,710 --> 00:30:40,830

ADDITIONAL CONTRACTS?  
>> OKAY.

438

00:30:40,830 --> 00:30:49,390

THANK YOU FOR THE QUESTION.  
SO, THIS DESIGN HAS BEEN WORKED

439

00:30:49,390 --> 00:30:54,540

ON FOR MANY YEARS.  
ACTUALLY I WANT TO INTRODUCE

440

00:30:54,540 --> 00:30:56,809

PETER, STANDING DIRECTOR TALL  
GUY.

441

00:30:56,809 --> 00:31:01,330

I IS PROJECT MANAGER TO  
REPONSIBLE FOR I LOW BOOM

442

00:31:01,330 --> 00:31:06,039

RESEARCH OVER THE YEARS.  
THIS IS DESIGN.

443

00:31:06,039 --> 00:31:13,690

AIRCRAFT, PRODUCES, LESS  
INTENSITY SO PEOPLE ON GROUND

444

00:31:13,690 --> 00:31:18,030

WILL NOT ANNOYED OR BOTHERED BY  
BOOM LEVEL.

445

00:31:18,030 --> 00:31:23,789

SO THIS IS NOT A THROUGH SOME  
FLIGHT MANUEVERS OR SOME ART

446

00:31:23,789 --> 00:31:27,179

FACTS HOPING THAT WE WILL BE  
ABLE IT REDUCE SONIC BOOM THIS

447

00:31:27,179 --> 00:31:32,140

IS REAL SCIENCE.  
LAST.

448

00:31:32,140 --> 00:31:36,780

HIS TEAM FOR THE AGAIN TEST  
SEVERAL YEARS FOCUSING ON LOW

449

00:31:36,780 --> 00:31:40,330

BOOM RESEARCH THROUGH GROUND  
TESTING AND ALSO WORKING WITH A

450

00:31:40,330 --> 00:31:45,559

COMMUNITY TO MEASURE COMMUNITY'S  
RESPONSE WE ACTUALLY FLEW OUR

451

00:31:45,559 --> 00:31:51,220

SIMULATED BOOM GENERATING,  
FLIGHT AND ASKED OUR PUBLIC ON

452

00:31:51,220 --> 00:31:53,539

THE GROUND HOW DID YOU FEEL  
ABOUT THAT?

453

00:31:53,539 --> 00:31:59,370

OR DID YOU SENSE THAT?  
>> AND LOT OF ANALYSIS SO

454

00:31:59,370 --> 00:32:02,360

TREMENDOUS A. RESEARCH HAS GONE  
INTO THAT.

455

00:32:02,360 --> 00:32:07,299

HOW DID LOCKHEED MARTIN ENDED UP  
WING THE AWARD, WE -- WE

456

00:32:07,299 --> 00:32:10,940

CERTAINLY HAD AN OPEN  
COMPETITION.

457

00:32:10,940 --> 00:32:17,660

AND LOCKHEED MARTIN'S DESIGN  
APPEARED TO BE THE BEST VALUE

458

00:32:17,660 --> 00:32:20,760

FOR THE GHOVT.  
THAT'S WHY WE SELECTED LOCK

459

00:32:20,760 --> 00:32:25,830

HEALED MARTIN AND AGAIN GRATE ON  
THAT AWARD WINNING.

460

00:32:25,830 --> 00:32:30,919

THIS IS STREVENT OUR INDUSTRY WE  
HAVE WORKED WITH INDUSTRY

461

00:32:30,919 --> 00:32:33,870

INDUSTRIALS PARTNERS TOGETHER TO  
GET HERE.

462

00:32:33,870 --> 00:32:38,250

THEN WHEN WE SENT OUT THAT TYPE  
OF SOLICITATION OUR STRONG

463

00:32:38,250 --> 00:32:45,559

INDUSTRY PARTNERS RESPONSE AND  
THIS IS MARVELOUS DESIGN THAT

464

00:32:45,559 --> 00:32:49,809

ONE DAY WILL BE ABLE TO OPEN UP  
TO FLYING PUBLIC TO ENJOY AGAIN

465

00:32:49,809 --> 00:32:52,890

SUPER SONIC FLIGHTS.  
SO JUST IMAGINE ONE LAST

466

00:32:52,890 --> 00:32:57,429

COMMENT, JUST IMAGINE YOU GO  
ANYWHERE IN THE WORLD LESS THAN

467

00:32:57,429 --> 00:33:02,450

SIX HOURS, FLYING A SUPERSONIC  
JET LINER.

468

00:33:02,450 --> 00:33:08,419

AND, WE OH TO OUR CHILDREN AND  
NEXT GENERATION THAT TYPE OF

469

00:33:08,419 --> 00:33:19,500

BREAK THROUGH FROM THE AVIATION.  
PRELIMINARY DESIGN GO ABOUT 17

470

00:33:19,500 --> 00:33:24,210

MONTHS AND THEN WE WILL GO  
THROUGH ANOTHER OPEN COMPETITION

471  
00:33:24,210 --> 00:33:30,000  
AND THEN SELECT BEST INDUSTRY  
PARTNER OR PERHAPS PARTNERS AND

472  
00:33:30,000 --> 00:33:35,950  
THEN, DESIGN AND BUILD ACTUAL  
DETAILED DESIGN AND BUILD WE ARE

473  
00:33:35,950 --> 00:33:40,470  
ESTIMATING ABOUT 4 TO 5 YEARS.  
AND THEN, WE WILL GO THROUGH

474  
00:33:40,470 --> 00:33:45,620  
FLIGHT TESTS DOES PRIOR  
SCIENTIFIC DATA TO WORK WITH THE

475  
00:33:45,620 --> 00:33:56,150  
REGULATORY AGENCIES AFTER THAT.  
>> ASK YOUR QUESTIONS.

476  
00:33:56,150 --> 00:34:00,250  
THEY DON'T WANT TO PASS UP  
OPPORTUNITIES TO THANK DAVID

477  
00:34:00,250 --> 00:34:04,840  
MELCHER, AND AIE FOR ALL THEY  
HAVE DONE THROUGH THE YEARS.

478  
00:34:04,840 --> 00:34:07,400  
YOU KNOW WE KEEP TALKING ABOUT  
NASA INDUSTRY DRURS OR

479  
00:34:07,400 --> 00:34:13,649  
GOVERNMENT INDUSTRY, PARTNERSHIP  
THAT'S REALLY, WHAT WE MEAN YOU

480  
00:34:13,649 --> 00:34:17,750  
KNOW I THINK 3 OR 4 YEARS AGO,  
YOU DIDN'T HEAR ANY ONE TALKING

481

00:34:17,750 --> 00:34:23,149

ABOUT NASA'S AERO BUDGET IT WAS  
NOT UNTIL YOU KNOW DAVID'S

482

00:34:23,149 --> 00:34:28,940

PREDECESSOR AND NOW DAVID AND AI  
AOUR INDUSTRY PARTNERS BEGAN TO

483

00:34:28,940 --> 00:34:33,379

TALK TO MEMBERS OF THE CONGRESS  
ABOUT THE CRITICAL IMPORTANCE OF

484

00:34:33,379 --> 00:34:36,359

GETTING UP TO SPEED SO THAT WE  
MAINTAIN OUR TECHNOLOGICAL

485

00:34:36,359 --> 00:34:38,940

LEADERSHIP IN THE WORLD IN THE  
FEEL OF AERO.

486

00:34:38,940 --> 00:34:41,470

IT IS ONE THING FOR US TO SAY  
IT.

487

00:34:41,470 --> 00:34:44,730

IT IS ANOTHER THING FOR INDUSTRY  
TO GO AND SAY YOU KNOW, IDEA

488

00:34:44,730 --> 00:34:51,360

THESE HAVE THEY ARE REALLY SOUND  
AND WE CAN MAKE IT HAPPEN.

489

00:34:51,360 --> 00:34:53,690

>> COME CONCEPT.  
AND THEN WE MARKETER IN WITH

490

00:34:53,690 --> 00:34:55,840

INDUSTRY.  
BECAUSE THEY ARE ONES THAT DO

491

00:34:55,840 --> 00:34:59,830

THE PHYSICAL BUILDING AND CARRY  
THESE CONCEPTS INTO REALITY.

492

00:34:59,830 --> 00:35:04,799

I JUST WANTED TO SAY THANK YOU  
FOR THAT.

493

00:35:04,799 --> 00:35:08,020

>> YOU KNOW SPEAK AS FORMER CEO  
OF AERO SPACE AND DEFENSE

494

00:35:08,020 --> 00:35:11,250

COMPANY.  
WHO CAME TO AIA, YOU KNOW

495

00:35:11,250 --> 00:35:19,349

INDUSTRY WANT TO INVEST IN  
TECHNOLOGY FOR THE FUTURE.

496

00:35:19,349 --> 00:36:02,490

BUT WHAT

497

00:36:02,490 --> 00:36:26,090

INDUSTRY ALWAYS LOOKIN

498

00:36:26,090 --> 00:36:29,590

WOMEN EVEN DOGS IS A GIRL SO HE  
IN BAD SHAPE.

499

00:36:29,590 --> 00:36:31,430

YOU KNOW.  
HE SURROUNDED BY WOMEN.

500

00:36:31,430 --> 00:36:34,570

BUT MIDDLE DAUGHTER THE 13  
QUESTION WANT MARINE CORP

501

00:36:34,570 --> 00:36:38,050

FIGHTER PILOT.  
WHAT I SEE HER FLYING IS

502  
00:36:38,050 --> 00:36:42,050  
SOMETHING THAT'S GOING TO BE  
EVEN MORE RAY ADVANCED THAN WE

503  
00:36:42,050 --> 00:36:45,010  
HAVE TODAY.  
IT WILL BE INTEGRATED WITH

504  
00:36:45,010 --> 00:36:50,200  
ROBOTIC SYSTEMSES, AND YOU KNOW  
SHE MADE BE FLYING WITH AN

505  
00:36:50,200 --> 00:36:54,390  
AIRPLANE ON HER WINGS OR SHE MAY  
BE FLYING BEHIND AN AUTO POWERED

506  
00:36:54,390 --> 00:36:58,780  
OR PILOTED VEHICLE BUT THAT'S  
THE WAVE OF THE FUTURE.

507  
00:36:58,780 --> 00:37:02,150  
>> I REALLY DO SEE THEM FLYING  
ON AIRCRAFT LIKE JAIWON SAID

508  
00:37:02,150 --> 00:37:05,930  
THAT CAN GO ANYPLACE IN THE  
WORLD AND UNDER SIX HOURS GOING

509  
00:37:05,930 --> 00:37:09,130  
BACK TO QUESTION ABOUT WHAT FOR  
THE TRAVELLING PUBLIC OR YOU

510  
00:37:09,130 --> 00:37:12,820  
WERE TALKING ABOUT COMFORT.  
JUST THINK ABOUT IT.

511  
00:37:12,820 --> 00:37:17,210

WHEN YOU ARE ON 13-HOUR TRIP.  
EVEN THE MOST COULDN'T FOR THE

512

00:37:17,210 --> 00:37:20,790  
ABLE AIRPLANES I HAVE BEEN IN  
TURNS INTO AIRPLANE.

513

00:37:20,790 --> 00:37:24,820  
AFTER ABOUT SIX HOURS.  
SO, I THINK JUST BY GETTING

514

00:37:24,820 --> 00:37:27,250  
FLIGHT TIME DOWN.  
IT IS LIKE SENDING PEOPLE TO

515

00:37:27,250 --> 00:37:31,109  
MARS WHEN WE TALK ABOUT THAT,  
THE THING WE WANT TO DO IS MAKE

516

00:37:31,109 --> 00:37:35,609  
GAME CHANGING DEVELOPMENTS IN  
SPACE PROPULSIONS SO WE CAN

517

00:37:35,609 --> 00:37:39,270  
SHORTEN THE TIME OF TRANSIT AND  
THAT'S WHAT'S REALLY IMPORTANT.

518

00:37:39,270 --> 00:37:42,630  
SO THINK WE ARE GOING TO FINDS  
MY DAUGHTER ARE GOING PLACE MUCH

519

00:37:42,630 --> 00:37:46,460  
FASTER.  
THEY ARE GOING PLACES AND MUCH

520

00:37:46,460 --> 00:37:51,330  
QUIETER FOR THE PUBLIC AND FOR  
PEOPLE IN THE AIRPLANES.

521

00:37:51,330 --> 00:37:53,420

MUCH MORE COMFORTABLE.  
WHERE THEY ARRIVE WHERE THEIR

522  
00:37:53,420 --> 00:37:57,180  
DESTINATION AND FEELING A LOT  
BETTER THAN SOME TIMES THEY FEEL

523  
00:37:57,180 --> 00:37:58,810  
TODAY.  
AND THEN THE OTHER THING IS, IT

524  
00:37:58,810 --> 00:38:01,720  
IS PROBABLY NOT GOING TO COST  
FORTUNE BECAUSE WE REALLY GOING

525  
00:38:01,720 --> 00:38:07,090  
TO GET COST OF FLYING DOWN.  
THAT WOULD BE MY YOU MALT HOPE.

526  
00:38:07,090 --> 00:38:11,260  
>> MUCH GREENER.  
AS MATTER OF.

527  
00:38:11,260 --> 00:38:16,570  
FLEWER TYPES OF FUEL BIOFUELS.  
BUT ALSO JUST IN THE ENGINE

528  
00:38:16,570 --> 00:38:21,520  
DESIGN, AND IN ENSURING THAT  
WHAT THEY PUT OUT IS CLEANER

529  
00:38:21,520 --> 00:38:23,560  
THAN WHAT WAS PUT OUT 4R579  
YEAR.

530  
00:38:23,560 --> 00:38:30,660  
AND EACH YEAR IS AN CHANGE.  
I HOPE.

531  
00:38:30,660 --> 00:38:36,510

>> HI NAME JULIA.  
-- WE CAN HEAR YOU.

532  
00:38:36,510 --> 00:38:40,520  
>> THANK YOU SO MUCH FOR HOSTING  
THIS.

533  
00:38:40,520 --> 00:38:45,150  
HOW DOES THIS -- DOES THIS TECH  
COME AT A COST TO CONSUMERS?

534  
00:38:45,150 --> 00:38:49,000  
BECAUSE IT SEEMS RIGHT NOW  
AVIATION INDUSTRY THAT A LOT OF

535  
00:38:49,000 --> 00:38:51,960  
THE CONSUMERS ARE CONCERNED  
ABOUT PRICING INCREASING PRICES

536  
00:38:51,960 --> 00:38:57,260  
AND IT SEEMS THAT A LOT OF  
AIRLINES ARE DOWN GRADING AND

537  
00:38:57,260 --> 00:39:04,790  
MAKING SAFER SMALL I THINK  
COUPLE DAYS AGO I SAW THAT

538  
00:39:04,790 --> 00:39:10,790  
AIRPLANE WERE TRYING TO PUT  
SEATS BACKWARDS AND THINGS LIKE

539  
00:39:10,790 --> 00:39:14,790  
THAT I WAS WONDERING IN.  
I THINK YOU WILL FINDS A GREAT

540  
00:39:14,790 --> 00:39:18,520  
BENEFIT TO THE CONSUMER.  
BECAUSE, AGAIN AS I SAID SHORTER

541  
00:39:18,520 --> 00:39:22,660

TRANSIT TIMES.  
MORE COMPETITION.

542

00:39:22,660 --> 00:39:24,859  
ACTUALLY WHEN YOU GET THERE AND  
THERE NOTHING LIKE COMPETITION

543

00:39:24,859 --> 00:39:28,060  
TO DRIVE THE PRICE DOWN.  
SO I SEE THOSE KINDS

544

00:39:28,060 --> 00:39:30,859  
THINGS WORKING.  
I DON'T THINK THAT THE GENERAL

545

00:39:30,859 --> 00:39:34,190  
AVIATION CONSUMER WILL SEE ANY  
AFFECT JUST YET.

546

00:39:34,190 --> 00:39:36,790  
BECAUSE THIS IS A GOVERNMENT  
INDUSTRY -- A GOVERNMENT

547

00:39:36,790 --> 00:39:40,310  
INDUSTRY PARTNERSHIP WHERE WE  
ARE PUTTING UP A SIGNIFICANT

548

00:39:40,310 --> 00:39:44,310  
PORTION OF THE EXPENSE.  
OH, THEY ALREADY PAID FOR THAT.

549

00:39:44,310 --> 00:39:46,980  
IN THEIR TAXPAYER DOLLARS.  
WHAT ARE TRYING TO DO IS

550

00:39:46,980 --> 00:39:50,050  
ACTUALLY PUT THE TAXPAYER  
DOLLARS TO WORKS IN MOST

551

00:39:50,050 --> 00:39:54,490

EFFICIENT AND EFFECTIVE MANNER  
THAT WE -- THAT WE CAN FIND.

552

00:39:54,490 --> 00:39:56,530

FOR THEM.

SO THINK IN LONG-TERM IT IS

553

00:39:56,530 --> 00:40:02,220

GOING TO BE GREAT BEEN FWIT TO  
THE CONSUMER.

554

00:40:02,220 --> 00:40:05,359

>> ONE QUICK POINTED.

ONE OF THE REQUIREMENTS WHY

555

00:40:05,359 --> 00:40:09,890

AIRLINES ARE GETTING REALLY  
STINGY ON EVERYTHING, IS BECAUSE

556

00:40:09,890 --> 00:40:16,240

THEIR FUEL COSTS, TAKES UP ABOUT  
1-THIRD OF THEIR TOTAL OPERATING

557

00:40:16,240 --> 00:40:19,660

COSTS.

THAT'S SORT OF AN ON THE AVERAGE

558

00:40:19,660 --> 00:40:25,030

INDUSTRY WIDE AVERAGE.

SO, THAT'S A HUGE COST ITEM FOR

559

00:40:25,030 --> 00:40:27,359

AIRLINES.

THAT'S WHY MANY OF THESE

560

00:40:27,359 --> 00:40:33,349

CONCEPTS, WE ARE GOING AFTER 50%  
OR MORE FUEL CONSUMPTION

561

00:40:33,349 --> 00:40:35,640

REDUCTION.  
SO BY THE TIME WE ACTUALLY

562  
00:40:35,640 --> 00:40:40,470  
IMPLEMENT THESE TECHNOLOGIES,  
AND INDUSTRIES THAT ARE STRONG

563  
00:40:40,470 --> 00:40:44,660  
U.S. INDUSTRY TURNING INTO THESE  
CON REST AND TECHNOLOGIES.

564  
00:40:44,660 --> 00:40:47,550  
PRODUCT.  
AND ACTUALLY SAVE 50% OR MORE

565  
00:40:47,550 --> 00:40:52,720  
FUEL CONSULT SHUN THINK OUR  
AIRLINE WILL RETURN SOME OF

566  
00:40:52,720 --> 00:41:04,119  
THOSE PROPHET BACK TO FLYING  
PUBLIC.

567  
00:41:04,119 --> 00:41:07,230  
>> FIRST QUESTION FOR DR. SHIN.  
YOUR SURROUNDED BY NUMBER OF

568  
00:41:07,230 --> 00:41:10,310  
CONCEPTS ILLUSTRATIONS AND MODEL  
I AM WONDERING WHY THIS CONCEPT

569  
00:41:10,310 --> 00:41:13,790  
YOU DECIDE UNVEIL TODAY AND WHAT  
TIME LINE IS FOR SPEAKING ABOUT

570  
00:41:13,790 --> 00:41:15,960  
REST OF THE THEM?  
SECOND QUESTION FOR GENERAL

571  
00:41:15,960 --> 00:41:20,460

BOLDEN, GENERAL COULD YOU  
ELABORATE A LITTLE BUILT WHAT

572

00:41:20,460 --> 00:41:30,150  
MADE THE DIFFERENCE IN BETWEEN  
THE FY 16 AND 17 REQUEST FOR

573

00:41:30,150 --> 00:41:33,430  
AERO?  
>> DEVELOPMENT AND INTRODUCTION

574

00:41:33,430 --> 00:41:40,890  
INTO IN THE AVIATION BUSINESS,  
IT TAKES SOME -- TAKES SOMETIME.

575

00:41:40,890 --> 00:41:44,730  
SOME, SOME PEOPLE SAY, ABOUT 15  
YEARS.

576

00:41:44,730 --> 00:41:47,430  
OR 20 YEARS SOMEWHERE BETWEEN  
THERE.

577

00:41:47,430 --> 00:41:52,089  
AND REASON WHY IS AGAIN IT IS  
REALLY HIGH TECH INDUSTRY.

578

00:41:52,089 --> 00:41:58,020  
AND FAIRLY INTENSIVE INDUSTRY  
AND SAFETY IS PARAMOUNT YOU

579

00:41:58,020 --> 00:42:01,630  
DON'T DO ANYTHING TO JEOPARDIZE  
SAFETY

580

00:42:01,630 --> 00:42:17,990  
>> TAKE IS THAT IS A LAST  
TECHNOLOGY FOR THE 15, 20 YEARS

581

00:42:17,990 --> 00:42:22,830

OUT.  
36R WE ARE NOT WORKING ON ANY

582  
00:42:22,830 --> 00:42:28,609  
NEAR-TERM TECHNOLOGIES WHILE OUR  
U.S. AVIATION INDUSTRY IS DOING

583  
00:42:28,609 --> 00:42:33,410  
GREAT JOB IN LEADING THE GLOBAL  
MARKET AVIATION MARKET.

584  
00:42:33,410 --> 00:42:37,849  
GOVERNMENT CAN MAKE A SMART  
INVESTMENT TO WORK ON NEXT

585  
00:42:37,849 --> 00:42:42,420  
GENERATION TECHNOLOGIES, SO,  
WHEN INDUSTRIES SEES MARKET

586  
00:42:42,420 --> 00:42:46,400  
OPPORTUNITY THEY BASED UPON  
THEIR BUSINESS CASE AND MODELS

587  
00:42:46,400 --> 00:42:49,760  
THEN THOSE PROMISING  
TECHNOLOGIES ARE READY FOR

588  
00:42:49,760 --> 00:42:53,630  
INDUSTRY TO STAKE ON.  
THAT'S OUR STRATEGY AND IT HAS

589  
00:42:53,630 --> 00:43:03,100  
BEEN WORTH IT.  
IT HAS WORKED VERY WELL.

590  
00:43:03,100 --> 00:43:07,910  
>> WE CAN ONLY TALK ABOUT WHAT  
NASA CAN ACTUALLY DO.

591  
00:43:07,910 --> 00:43:11,830

SO, WE ARE TRYING TO -- WITH  
FULL FUNDING THAT PRESIDENT

592

00:43:11,830 --> 00:43:17,470  
REQUESTED, WE CAN ACTUALLY DO  
SEVERAL FLIGHT DEMONSTRATORS AND

593

00:43:17,470 --> 00:43:22,170  
DESIGN AND BUILD AND START  
FLYING DURING ONLY 2020 TIME

594

00:43:22,170 --> 00:43:25,940  
CAME FROM.  
AND THEN, THAT'S ANYWHERE

595

00:43:25,940 --> 00:43:30,520  
BETWEEN 10 AND 15 YEARS OUT.  
AND THEN, WE WILL CONTINUE TO

596

00:43:30,520 --> 00:43:34,820  
WORK WITH YOU AS INDUSTRIES TO  
INTRODUCE THESE BENEFITS AND

597

00:43:34,820 --> 00:43:39,150  
TECHNOLOGIES AND THEN, YOU CAN  
GUESS DEPENDING UPON THE MARKET

598

00:43:39,150 --> 00:43:44,960  
CONDITION U.S. COMPANIES WILL  
DECIDE WHEN TO ENTER THE MARKET.

599

00:43:44,960 --> 00:43:47,810  
>> SECOND RESPONSE OF YOUR  
QUESTION PATIENCE AND

600

00:43:47,810 --> 00:43:50,210  
PERSISTANCE.  
THE QUESTION WAS WHAT'S THE

601

00:43:50,210 --> 00:43:54,160

## DIFFERENCE BETWEEN THE 2016 BUDGET AND THE 2017 BUDGET

602

00:43:54,160 --> 00:43:58,900

LEVELS?

IT IS THE RESULT OF KNOWING THAT

603

00:43:58,900 --> 00:44:02,440

YOU CAN'T GO FOR EVERYTHING ALL

AT ONCE, AND THE FACT THAT YOU

604

00:44:02,440 --> 00:44:05,030

GOT TO BE ABLE TO DEMONSTRATE TO

PEOPLE THAT WHEN YOU MAKE A

605

00:44:05,030 --> 00:44:07,119

PROMISE, YOU ARE GOING TO

DELIVER.

606

00:44:07,119 --> 00:44:09,490

YOU ARE GOING TO DELIVER

HOPEFULLY ON TIME.

607

00:44:09,490 --> 00:44:12,810

AND ON COST.

AND I THINK JAIWON MENTIONED WE

608

00:44:12,810 --> 00:44:15,810

ROLLED OUT NEW STRATEGIC PLAN

FOR AERO IN 2013.

609

00:44:15,810 --> 00:44:21,839

AND WE STARTED TALKING ABOUT YOU

KNOW PLAN THAT WE WANTED TO PUT

610

00:44:21,839 --> 00:44:25,250

IN PLACE DAVID MELCHER TALKED

ABOUT INDUSTRY BEING WILLING TO

611

00:44:25,250 --> 00:44:29,599

FOLLOW HIS LONG AS THERE IS A  
CONCRETE PLAN IN PLACE WITH

612

00:44:29,599 --> 00:44:34,030

DETAILS THAT PEOPLE WHO ARE  
PRETTY SHARP CAN FOLLOW BECAUSE

613

00:44:34,030 --> 00:44:36,700

THEY DON'T WANT TO THROW AWAY  
GOOD MONEYING AFTER BAD.

614

00:44:36,700 --> 00:44:38,400

JUST TOOK US THE TIME TO GET  
THERE.

615

00:44:38,400 --> 00:44:42,839

AND PROBABLY THE BIGGEST THING  
WAS YOU KNOW I GOT -- I AM

616

00:44:42,839 --> 00:44:48,140

AVIATION I AM A PILOT I CAME TO  
NASA TO TRY TO REINSTILL SOME

617

00:44:48,140 --> 00:44:51,349

VIGOR INTO THE AERO MISSION  
DIRECTOR.

618

00:44:51,349 --> 00:44:55,820

BUT EVERY YEAR, MY FIRST FEW  
YEARS YOU HAVE YOU KNOW YOU HAVE

619

00:44:55,820 --> 00:45:01,550

GOT PUT PRIORITIES.  
SO AERO JUST ALWAYS STAYEDRY AT

620

00:45:01,550 --> 00:45:04,660

THE SAME LEVEL IT WAS IN AND  
THEN WHEN I STARTED GOING

621

00:45:04,660 --> 00:45:07,630

TALKING TO CONGRESS NOR AND MORE  
THEY SAID HEY YOU DIDN'T ASK FOR

622

00:45:07,630 --> 00:45:10,420

IT.

I SAID, OH OKAY IF THAT'S ALL I

623

00:45:10,420 --> 00:45:13,390

GOT TO DO.

I CAN HANDLE THAT.

624

00:45:13,390 --> 00:45:20,520

AND IT IS SOUNDS TRIVIAL.

TO LEADERSHIP OF AGENCY AND WE

625

00:45:20,520 --> 00:45:25,650

SAID LOOK THIS AGENCY HAS LED

THE NATION FOR 100 YEARS.

626

00:45:25,650 --> 00:45:30,220

FIRST AS NACA AND NOW AS NASA.

WE HAVE MADE THE NATION NUMBER

627

00:45:30,220 --> 00:45:35,770

ONE IN THE AND WRIGHT BRIEFS

INVENTED AIRPLANE AMERICA WALKED

628

00:45:35,770 --> 00:45:38,190

WAY FROM AIRPLANE FOR ABOUT 15

YEARS.

629

00:45:38,190 --> 00:45:43,670

AND NACA CAME ABOUT IN 1915,

BECAUSE, THE WRIGHT BROTHERS

630

00:45:43,670 --> 00:45:46,670

COULD NOT GET AN AMERICAN

COMPANY TO BUY AN AIRPLANE.

631

00:45:46,670 --> 00:45:49,500

THEY COULDN'T GET U.S. ARMY AIR  
CORP TO BUY AN AIRPLANE.

632

00:45:49,500 --> 00:45:52,800  
AND EUROPEAN STARTED BUILDING  
AIRPLANES AND IMPROVING ON

633

00:45:52,800 --> 00:45:57,609  
AIRPLANE WE WOKE UP.  
IT TOOK US 12 YEARS TO WAKE UP

634

00:45:57,609 --> 00:46:02,050  
AND NACA WAS FORD OR JUST AS  
NASA WAS FORMED TO TRANSITION

635

00:46:02,050 --> 00:46:07,099  
NACA TO SPACE WHEN WE WERE  
AWAKENED BY SOME THING THAT

636

00:46:07,099 --> 00:46:10,750  
THREATENED OUR LEADERSHIP.  
WE JUST DON'T WANT TO FINDS

637

00:46:10,750 --> 00:46:13,310  
OURSELF THERE AGAIN.  
AND SO WE DECIDED THAT THE BEST

638

00:46:13,310 --> 00:46:16,630  
THING FOR NASA TO DO WAS EXERT  
ITS LEADERSHIP AND ITS INFLUENCE

639

00:46:16,630 --> 00:46:20,940  
I CONSIDER MYSELF TO BE THE  
PRESIDENT AND THE CONGRESS'S

640

00:46:20,940 --> 00:46:24,750  
NUMBER ONE ADVISOR ON CIVIL AERO  
AND SPACE.

641

00:46:24,750 --> 00:46:28,609

I HAVE GOT SOME INCREDIBLY  
BRILLIANT ENGINEERS AND

642

00:46:28,609 --> 00:46:32,130

SCIENTISTS AND PEOPLE WHO ADVISE  
ME TO ADVISE THE PRESIDENT AND

643

00:46:32,130 --> 00:46:34,570

THE CONGRESS WE GENERALLY THINK  
WHEN WE THOUGHT SOMETHING

644

00:46:34,570 --> 00:46:38,730

THROUGH AND WE TAKE TO THEM, IF  
THEY CHOOSE TO FOLLOW US WE

645

00:46:38,730 --> 00:46:42,359

REGULAR THIS IS BASS LONG TIME  
IN COMING THIS IS YOU KNOW WE

646

00:46:42,359 --> 00:46:46,190

STARTED THIS BACK IN 2013.  
THAT'S WHAT MAKES TODAY SUCH A

647

00:46:46,190 --> 00:46:50,250

BIG DAY.  
MY HAT OFF TO THE FOLKS IN AERO

648

00:46:50,250 --> 00:46:53,730

FOR BEING PATIENT AND YOU KNOW  
ALLOWING ME TO BE PATIENT.

649

00:46:53,730 --> 00:46:55,690

AND LEARN.  
>> THANK YOU.

650

00:46:55,690 --> 00:46:58,810

>> WE WILL HAVE COME TO A CLOSE  
HERE PRETTY SOON.

651

00:46:58,810 --> 00:47:01,460

MAYBE ONE MORE QUESTION.  
I DO HAVE SEVERAL FOLKS HERE

652  
00:47:01,460 --> 00:47:08,250  
THAT CAN GIVE YOU MORE DETAILS  
ONCE WE OFFICIALLY ENDS.

653  
00:47:08,250 --> 00:47:17,760  
ANYONE ELSE?  
>>

654  
00:47:17,760 --> 00:47:22,119  
>> CAN YOU EXPLAIN HOW THIS  
QUEST WILL ACHIEVE THE LOW BOOM

655  
00:47:22,119 --> 00:47:26,349  
WITHOUT GETTING TOO TECHNICAL?  
AND I MEAN IS IT CERTAIN

656  
00:47:26,349 --> 00:47:29,780  
FEATURES DEATH OF SIGN?  
AND ALSO HOW IT COMPARES TO

657  
00:47:29,780 --> 00:47:33,589  
PREVIOUS EFFORTS TO ACHIEVE  
SUPER SONIC INCLUDING CONCORDE

658  
00:47:33,589 --> 00:47:37,670  
WHICH I KNOW WAS NOT THAT QUIET  
AND SOME U.S. EFFORT AS WELL.

659  
00:47:37,670 --> 00:47:42,250  
>>  
>> I CAN JUST REALLY GIVE YOU

660  
00:47:42,250 --> 00:47:46,050  
QUICK ANSWER.  
BUT THIS IS GREAT SEGUE YOU ALL

661  
00:47:46,050 --> 00:47:50,060

COME DOWN I THINK IT IS  
DOWNSTAIRS, WE ARE GOING TO HAVE

662

00:47:50,060 --> 00:47:54,780

ANOTHER HOUR OF REALLY DETAILED  
Q AND A SESSIONS.

663

00:47:54,780 --> 00:47:56,589

WE CAN BETTER ANSWER THAT DURING  
THAT SESSION.

664

00:47:56,589 --> 00:48:02,690

BUT VERY QUICKLY, AGAIN I  
EMPHASIZE THE DESIGNS.

665

00:48:02,690 --> 00:48:07,510

SO YOU SEE THE LONG AND VERY  
POINTED NOSE THAT'S WILL

666

00:48:07,510 --> 00:48:11,380

ACTUALLY -- THAT'S DESIGN  
FEATURE FOR THE LOW BOOM SUPER

667

00:48:11,380 --> 00:48:16,520

SONIC AIRPLANE AND YEARS OF  
RESEARCH REVEALED TOLD US YOU

668

00:48:16,520 --> 00:48:21,250

HAVE TO WILL SENDER AND LONG  
NOSE, BUT PRESENTS LOT OF

669

00:48:21,250 --> 00:48:24,670

CHALLENGE.  
SO WE HAVE OVERCOME A LOT OF OUR

670

00:48:24,670 --> 00:48:29,650

TECHNICAL CHALLENGES TO FLY THAT  
TYPE OF A SHAPE OF AIRCRAFT.

671

00:48:29,650 --> 00:48:33,250

SO, LET ME JUST GIVE YOU THAT AS  
TEASER.

672

00:48:33,250 --> 00:48:37,500

AND IN NEXT HOUR OR SO, PLEASE  
COME JOIN YOU WILL AND LEARN

673

00:48:37,500 --> 00:48:42,609

MORE ABOUT WHAT WE MEAN BY FIVE  
DEMONSTRATORS OR SIX AND WHAT WE

674

00:48:42,609 --> 00:48:49,780

ARE TRYING TO DO OVER THE NEXT  
TEN YEARS.

675

00:48:49,780 --> 00:48:50,940

>>

>> THAT'S GOING DO FOR OUR NEWS

676

00:48:50,940 --> 00:48:53,460

CONFERENCE TODAY.  
I LIKE THANK OUR PANELIST,

677

00:48:53,460 --> 00:48:57,079

CHARLIE, JAIWON AND DAVID FOR  
JOINING US TODAY.

678

00:48:57,079 --> 00:48:59,619

I HAVE A COLLEAGUE OVER HERE  
THAT WHATS PRESS KITS FOR THE

679

00:48:59,619 --> 00:49:04,680

MEDIA AND WE HAVE REMAINING  
AFTER MEDIA GET THEIR COPY OF IT

680

00:49:04,680 --> 00:49:07,940

WE CAN GIVE TO OTHER PEOPLE.  
IF YOU LIKE MORE INFORMATION

681

00:49:07,940 --> 00:49:17,070

ABOUT THIS JOIN US ON THE WEB  
AT: FOR MORE INFORMATION ON

682

00:49:17,070 --> 00:49:23,690

ABOUT ANY OF THAT'S VARIOUS RAMS  
AND PROJECT YOU CAN JOIN US AT:

683

00:49:23,690 --> 00:49:26,310

OR AMONG ANY OF OTHER MANY  
SOCIAL MEDIA PRODUCTS.