Okay, good afternoon. I'm Clayton Turner, deputy director of NASA's Langley Research Center, and it is my honor to welcome everyone to today's special event -- the official naming ceremony of the future Katherine G. Johnson computational research facility. At this time, please silence your cell phones as we honor our nation with the posting of our country's colors by the U.S. joint base Langley eustis color guard, and the singing of our national anthem by NASA Langley researcher Kerry Gough. "O say, can you see by the dawn's early light "What proudly we hailed at the twilight's last gleaming? "By the dawn's early light "What so proudly we hailed at the twilight's last gleaming?"
WHOSE BROAD STRIPES AND BRIGHT STARS

THROUGH THE PERILOUS FIGHT O'ER THE RAMPARTS

WE WATCHED WERE SO GALLANTLY

STREAMING? M AND THE ROCKETS'

RED GLARE THE BOMBS BURSTING

IN AIR M GAVE PROOF

THROUGH THE NIGHT THAT OUR FLAG

WAS STILL THERE M OH, SAY, DOES THAT

STAR-SPANGLED BANNER YET WAVE M

O'ER THE LAND OF THE FREE M

AND THE HOME OF THE BRAVE? M M

>> TURN, POST.
>> YOU CAN TAKE YOUR SEATS,

ALTHOUGH SHE NEEDS VERY LITTLE INTRODUCTION, FIRST AND FOREMOST PLEASE JOIN ME IN WELCOMING BACK TO NASA LANGLEY RESEARCH CENTER TODAY'S SPECIAL GUEST OF HONOR, NASA LANGLEY RETIREE AND "HUMAN COMPUTER," KATHERINE G. JOHNSON. [ APPLAUSE ] ALSO JOINING HER TODAY ARE HER HUSBAND, JAMES, AND DAUGHTERS, JOYLETTE HYLICK AND KATHERINE MOORE.

WE ALSO HAVE SOME VERY SPECIAL GUESTS JOINING US TODAY, AND IT'S MY HONOR TO INTRODUCE THEM. THE HONORABLE BOBBY SCOTT, CONGRESSMAN FROM THE 3rd DISTRICT OF VIRGINIA.
REPRESENTING CONGRESSMAN

SCOTT RIGELL, 2nd DISTRICT OF VIRGINIA, IS HIS DISTRICT

DIRECTOR SHANNON KENDRICK. [ APPLAUSE ]

THE HONORABLE MARCIA PRICE, DELEGATE TO THE VIRGINIA GENERAL ASSEMBLY FROM THE 95th DISTRICT. [ APPLAUSE ]

THE HONORABLE GEORGE WALLACE, MAYOR OF THE CITY OF HAMPTON,

CITY COUNCILMAN, DONNIE TUCK. [ APPLAUSE ]

>> VALERIE PRICE, THE FIRST LADY OF NEWPORT NEWS. [ APPLAUSE ]


WOMEN WHO HELPED WIN THE SPACE RACE."

I WOULD ALSO LIKE TO RECOGNIZE A COUPLE GUESTS IN OUR AUDIENCE.

NASA DEPUTY CHIEF OF STAFF JON HERCZEG AND NASA CHIEF COUNSEL SUMARA THOMPSON-KING. [APPLAUSE]

SO THERE'S SOMETHING YOU SHOULD KNOW ABOUT WHY WE PICKED TODAY TO HOLD THIS SPECIAL EVENT. 55 YEARS AGO, ON MAY 5th, 1961, ALAN SHEPARD BECAME THE FIRST AMERICAN TO EVER FLY IN SPACE. HIS MERCURY CAPSULE, CALLED FREEDOM 7, CARRIED HIM UP ABOUT 116 MILES, AND 15 MINUTES LATER HE LANDED SAFELY 310 MILES DOWNRANGE FROM THE KENNEDY SPACE CENTER IN THE ATLANTIC OCEAN. MILLIONS OF PEOPLE AROUND THE WORLD WATCHED SHEPARD'S FLIGHT, BUT WHAT THEY DIDN'T KNOW AT THE
TIME WAS THAT THE CALCULATIONS
THAT GOT HIM INTO SPACE AND

SAFELY HOME WERE DONE BY TODAY'S
GUEST OF HONOR,

KATHERINE JOHNSON.

[ APPLAUSE ]

I CAN'T IMAGINE WHAT YOU MUST
HAVE BEEN FEELING DURING THOSE

15 MINUTES.

I WANTED TO ALSO POINT OUT

ANOTHER INTERESTING FACT ABOUT
TODAY'S EVENT, WHICH IS BEING

HELD IN OUR REID CONFERENCE
CENTER.

C DR. HENRY J.E. REID WAS THE
CENTER DIRECTOR WHEN KATHERINE

WAS HIRED IN 1953.

HE LED LANGLEY FROM 1926 TO

THE DOWN OF THE SPACE AGE.

JUST DOWN THE HALL FROM US IS
THE PEARL YOUNG THEATER, NAMED
FOR THE FIRST WOMAN HIRED TO DO RESEARCH HERE IN 1922.

ALL TOLD, THERE ARE HUNDREDS OF BUILDINGS AND FACILITIES HERE AT LANGLEY, YET ONLY FOUR OF THEM ARE ACTUALLY NAMED AFTER FORMER EMPLOYEES. KATHERINE, TODAY YOU JOIN THAT ELITE GROUP WITH THE OFFICIAL NAMING OF THE KATHERINE G. JOHNSON COMPUTATIONAL RESEARCH FACILITY.

THE COMPUTATIONAL RESEARCH FACILITY IS A 40,000 SQUARE FOOT CONSOLIDATED DATA CENTER THAT WILL ALLOW OUR ENGINEERS AND SCIENTISTS TO PERFORM ADVANCED COMPUTATIONAL RESEARCH AND DEVELOPMENT, CRUNCHING DATA AND NUMBERS THAT WILL ONE DAY HELP NASA LAND HUMANS ON MARS, DESIGN QUIETER, FASTER AND MORE.
EFFICIENT FUTURE AIRCRAFT, AND

00:08:10,540 --> 00:08:13,890
HELP US BETTER UNDERSTAND OUR
CHANGING CLIMATE.

00:08:13,889 --> 00:08:16,180
IT'S NOT UNLIKE THE WORK THAT
KATHERINE DID DURING HER TENURE

00:08:16,180 --> 00:08:20,090
AT LANGLEY, HELPING NASA SEND
THE FIRST AMERICANS INTO SPACE,

00:08:20,089 --> 00:08:23,679
INTO ORBIT AROUND THE EARTH, AND
TO THE MOON AND BACK.

00:08:23,680 --> 00:08:26,689
EXCEPT SHE DIDN'T HAVE A
40,000 SQUARE FOOT BUILDING FULL

00:08:26,689 --> 00:08:31,719
OF CUTTING-EDGE TECHNOLOGY.
SHE DID MOST OF HER CALCULATIONS

00:08:31,720 --> 00:08:35,209
BY HAND, OR IN HER HEAD, AND
WITH THE HELP OF THE TECHNOLOGY

00:08:35,208 --> 00:08:38,688
OF HER DAY, MECHANICAL
CALCULATOR-TYPE MACHINES CALLED

00:08:38,688 --> 00:08:48,459
MONROE AND FRIDEN MACHINES.
PERHAPS JUST AS AMAZING IS THAT

00:08:48,460 --> 00:08:51,689
KATHERINE BEGAN HER WORK AT NASA
WHEN WOMEN AND MINORITIES WERE

00:08:51,688 --> 00:08:53,899
MARGINALIZED IN AMERICAN
SOCIETY.
WHEN SHE STARTED WORK IN 1953 OUR CENTER WAS STILL SEGREGATED, BUT IT WAS HER SKILLS, SPIRIT, CURIOSITY AND DETERMINATION THAT HELPED NOT ONLY SOLVE THE DIFFICULT PROBLEMS OF SPACE TRAVEL, BUT ALSO HELPED BREAK THE RACIAL AND GENDER BARRIERS SHE AND HER COLLEAGUES FACED.

NOW IT IS MY HONOR TO INTRODUCE OUR FIRST GUEST SPEAKER, THE ACTING DIRECTOR OF OUR OFFICE OF EQUAL OPPORTUNITY, MEL FEREBEE.

MEL IS WHO INITIALLY PROPOSED THE IDEA OF NAMING THE CRF AFTER KATHERINE, AND THEN WORKED THE APPROVAL PROCESS WITH SENIOR NASA OFFICIALS.

PLEASE JOIN ME IN WELCOMING MEL TO THE STAGE.

[ APPLAUSE ]
THANK YOU, CLAYTON, AND GOOD AFTERNOON, EVERYONE.

I FIRST HEARD OF DR. JOHNSON'S STORY 41 YEARS AGO HERE AS A HIGH SCHOOL STUDENT. MANY OF US ASSEMBLED HERE TODAY KNOW THE STORY, BUT IT'S WORTH HIGHLIGHTING AGAIN.

FROM AN EARLY AGE, KATHERINE TOOK ADVANTAGE OF THE OPPORTUNITIES THAT CAME HER WAY -- HER PASSION FOR NUMBERS AND MATHEMATICS LED HER TO SHARE HER KNOWLEDGE FIRST AS A TEACHER AND THEN TO PURSUE A CAREER AT THE LANGLEY AERONAUTICAL LABORATORY, WHICH BECAME NASA LANGLEY RESEARCH CENTER.

DURING A TIME WHEN WOMEN AND MINORITIES WERE MARGINALIZED IN AMERICAN SOCIETY, SHE PERSEVERED.

SHE EXCELLED AT WHAT SHE DID. HER REPUTATION FOR EXCELLENCE
LED TO ASSIGNMENTS THAT WERE CRUCIAL TO AMERICA'S EARLY SPACE PROGRAM.

SHE CALCULATED THE LAUNCH WINDOW AND TRAJECTORY OF THE FIRST AMERICAN IN SPACE, ALAN SHEPARD,

WHO MADE THAT HISTORIC FLIGHT 55 YEARS AGO. ALSO, TODAY IS THE VERY FIRST NATIONAL ASTRONAUTS DAY.

HER REPUTATION FOR ACCURACY WAS SO WELL KNOWN THAT ASTRONAUT JOHN GLENN, WHOSE ORBITAL TRAJECTORY WAS THE FIRST TO BE CALCULATED BY AN ELECTRONIC COMPUTER, ASKED FOR HER TO CHECK THOSE CALCULATIONS.

IN FACT, SHE HELPED THE AGENCY ESTABLISH CONFIDENCE IN THIS NEW ELECTRONIC COMPUTING.

DR. JOHNSON WAS ASSIGNED TO WORK ON THE APOLLO 11 MISSION, THE
FIRST MISSION WHICH HUMANS LANDED AND WALKED ON THE MOON.

AND WHEN OUR NATION IDENTIFIED THE NEED FOR A REUSABLE SPACE VEHICLE, THE SPACE SHUTTLE -- LARGE ENOUGH TO CARRY THE BUILDING BLOCKS OF WHAT HAS NOW BECOME THE WORLD'S ONLY IN-SPACE LABORATORY, THE INTERNATIONAL SPACE STATION -- SHE CALCULATED THOSE ORBITAL TRAJECTORIES TOO. THROUGHOUT HER CAREER AND DURING HER RETIREMENT, SHE TOOK THE TIME TO ENCOURAGE YOUNG PEOPLE, ESPECIALLY GIRLS, TO PURSUE THEIR DREAMS IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATH.

DR. JOHNSON, THANK YOU FOR SETTING AN EXAMPLE FROM WHICH WE CAN ALL LEARN -- TO FOLLOW YOUR PASSION, EXCEL IN YOUR WORK, AND ENCOURAGE OTHERS TO DO THE SAME.
YOU ARE AN INSPIRATION TO ME,

AND TO ALL OF US, NOT ONLY HERE
AT LANGLEY, BUT ACROSS NASA AND

OUR NATION.
THANK YOU.

[ APPLAUSE ]

>> THANK YOU, MEL.

AT THIS TIME, LADIES AND
GENTLEMEN, WE'D LIKE TO SHARE A

SHORT VIDEO ABOUT KATHERINE'S
CAREER.

[ APPLAUSE ]

>> NASA LANGLEY HAS BEEN PROUD
TO CALL HAMPTON HOME FOR ALMOST

100 YEARS AND WE OUR GRATEFUL
FOR THE SUPPORT THE CITY AND ITS
LEADERS HAVE SHOWN US.
WE AT LANGLEY ARE HAPPY TO

WELCOME BACK HAMPTON MAYOR
GEORGE WALLACE FOR SOME OPENING

REMARKS.
[ APPLAUSE ]

>> GOOD AFTERNOON, LADIES AND
GENTLEMEN.

IT IS ALTOGETHER FITTING AND
PROPER THAT WE ARE HERE TODAY TO

HONOR A GREAT LADY WITH ANOTHER
SYMBOL OF HER LONG AND
DISTINGUISHED CAREER.
WE KNOW THAT SHE WAS A CHILD

PRODIGY WITH A PROLIFIC CAPACITY
TO COUNT EVERYTHING FROM THE
NUMBERS OF STEPS FROM HER STEPS
TO THE CHURCH TO THE NUMBER OF
DISHES ON THE SHELF TO COUNTING
THE TRAJECTORY OF ASTRONAUT ALAN
GLENN'S 1961 AMERICAN FLIGHT TO
SPACE.
SHE BECAME A SUMA CUM LAUDE GRADUATE AT THE AGE OF 18.

00:15:57.669 --> 00:16:00.380
SHE WAS AMONG THE EARLY GROUP OF WOMEN HIRED BY NASA TO BECOME

00:16:00.380 --> 00:16:05.299
KNOWN AS ONE OF THE GROUP OF COMPUTERS IN SKIRTS.

00:16:05.299 --> 00:16:10.109
HER EXCELLENCE WAS KNOWN AND NOTED EARLY, AND SHE WAS ASKED

00:16:10.110 --> 00:16:13.730
BY -- AS HAS BEEN INDICATED BY ASTRONAUT JOHN GLENN TO DOUBLE

00:16:13.730 --> 00:16:17.829
CHECK THAT HE MADE THE CORRECT COMPUTER CALCULATION TO MAKE

00:16:17.828 --> 00:16:20.979
SURE THAT THE NUMBERS WERE CORRECT.

00:16:20.980 --> 00:16:26.329
SHE'S A WIFE OTHER MOTHER, AND A GOOD FRIEND TO MANY.

00:16:26.328 --> 00:16:29.539
ON NOVEMBER 4th, 2015, SHE WAS GIVEN THE PRESIDENTIAL MEDAL OF

00:16:29.539 --> 00:16:35.049
FREEDOM BY PRESIDENT BARACK OBAMA, AS YOU WILL SEE.

00:16:35.049 --> 00:16:37.799
MOST RECENTLY, HAMPTON ACKNOWLEDGES THE GREAT

00:16:37.799 --> 00:16:43.088
HAMPTONIAN IN OUR MIDST BY CONVEYING UPON HER THE HIGHEST
HONOR THAT WE CAN GIVE, THE DISTINGUISHED CITIZENS MEDAL FOR EXTRAORDINARY SERVICE TO HAMPTON AND AMERICA.

TO YOU, MRS. JOHNSON, THANK YOU FOR WHAT YOU HAVE DONE FOR ALL

OF US, AND MAY THE RICH REWARDS AND GOOD BLESSINGS CONTINUE TO

BE YOURS.

THANK YOU.

[ APPLAUSE ]

THANK YOU, MAYOR WALLACE.

IN CASE YOU DIDN'T KNOW IT, 20th CENTURY FOX IS CURRENTLY SHOOTING A MAJOR MOTION PICTURE, "HIDDEN FIGURES," WHICH IS SCHEDULED FOR RELEASE LATER THIS YEAR.

THE FILM IS BASED UPON THE BOOK WRITTEN BY TODAY'S KEYNOTE SPEAKER, MS. MARGOT SHETTERLY. I'D LIKE TO SHARE WITH YOU A
VIDEO MESSAGE FROM SOME OF THE
CAST FROM THE MOVIE.

>> HELLO, HELLO, HELLO.
I JUST WANTED TO PERSONALLY

CONGRATULATE A HERO OF MINE,
MISS KATHERINE JOHNSON.

THANK YOU SO MUCH FOR OPENING UP
SO MANY DOORS FOR YOUNG

AFRICAN-AMERICAN WOMEN LIKE
MYSELF, AND SO MANY OTHERS, WHO

USE THEIR INTELLIGENCE AS THEIR
POWER TO PERSEVERE THROUGH ALL

OBSTACLES THAT MAY BE THROWN
THEIR WAY.

I LOVE YOU SO MUCH AND I'M SO
HONORED TO EVEN TELL YOU THANK

YOU.
GOD BLESS YOU, MISS KATHERINE,

YOU ARE A TRUE ICON.
YOU ARE A LEADER AND THE WORLD

WILL BE FOREVER BETTER BECAUSE
OF YOU.

GOD BLESS.
Mrs. Katherine Johnson, I am happy that you are being, finally being, acknowledged for your contributions to history, to the world, to the space program, to women of color, to our history and may your name long live on that building at Langley.

I appreciate you and congratulations.

>> I'm Taraji P. Henson and I want to congratulate you, Miss Katherine Goble Johnson, Miss Queen Johnson, the brilliant mind, Miss Johnson for the naming of the building, rightfully deserved. You deserve it.

They should name NASA after you. I see you --

Thank you for your service.

[Laughter and applause]
>> GREAT MESSAGE FROM
20th CENTURY FOX.

WE'LL HAVE TO WORK ON THAT LAST
PART.

SO CHARLIE BOLDEN DID WANT TO BE
HERE TODAY, BUT A SCHEDULING
CONFLICT HAS KEPT HIM AWAY.
I HAVE A NOTE THAT I WANT TO
READ SO HE'S THE PERSON WHO CAN
MAYBE START TO GET THAT DONE.

DEAR MS. JOHNSON, I'M WRITING TO
OFFER MY PROFOUND

CONGRATULATIONS TO YOU ON BEING
CHOSEN TO BE THE NAMESAKE FOR
LANGLEY'S NEWEST BUILDING.
ALONG WITH MY GRATITUDE FOR THE
TRAIL YOU HAVE BLAZED FOR NASA,
THE MATHEMATICIANS, FOR SWIM,
FOR SPACE SCIENTISTS, FOR
AFRICAN-AMERICANS, AND FOR
DREAMERS EVERYWHERE.
I AM TOLD YOU ONCE REMARKED THAT
EVEN THOUGH YOU GREW UP IN THE HEIGHT OF SEGREGATION, YOU DID NOT HAVE TIME TO THINK ABOUT YOUR PLACE IN HISTORY AND THAT YOU NEVER HAD A FEELING OF INFERIORITY.

INSTEAD, YOU CONSIDERED YOURSELF AS YOU DESCRIBED IT, AS GOOD AS ANYBODY ELSE BUT NO BETTER. THE TRUTH OF THE MATTER IS THAT YOU ARE BETTER. ARE YOU ONE OF THE GREATEST MINDS EVER TO GRACE OUR AGENCY, OUR COUNTRY, AND BECAUSE OF YOUR MIND, HEART, AND SOUL, MY OWN GRANDDAUGHTERS AND YOUNG AMERICANS LIKE THEM CAN PURSUE THEIR OWN DREAMS WITHOUT A FEELING OF INFERIORITY. THEREFORE, I HOPE TODAY THAT ALL OF US WILL TAKE A STEP BACK AND REFLECT ON YOUR IMPACT.

YOU HAVE ALREADY FOREVER LEFT YOUR MARK ON THE LANGLEY
RESEARCH CENTER AND ON NASA.
NOW THIS MARK WILL BE FORMALLY

INSCRIBED ON LANGLEY'S CAMPUS IN
THE FORM OF THE KATHERINE G.

WITH GREAT AWE AND APPRECIATION,
CHARLIE F. BOLDEN,

JOINING US TODAY IS U.S.
CONGRESSMAN

SCOTT RIGELL'S DISTRICT DIRECTOR
FOR THE 2nd DISTRICT.

AND SHANNON KENDRICK HAS
SOMETHING SPECIAL FOR YOU TODAY,

KATH.
>> THANK YOU VERY MUCH, GOOD

AFTERNOON, EVERYONE.
IT IS AN HAPPEOR AND A -- AN

HONOR AND PRIVILEGE TO BE HERE
BEFORE YOU TODAY ON THIS MOST
AUSPICIOUS OCCASION.
THIS IS MY THIRD AND JUST -- IN
ALMOST TWO MONTHS EVENT WHERE
YOU ARE RECEIVING YOUR DUE
AND IT'S WONDERFUL TO PERSONALLY
BE HERE TO WITNESS IT.
I'D HAVE TO SAY THAT I'M
APPRECIATIVE THAT YOU CHARTED A COURSE AND BLAZED A TRAIL FOR US
ALL.
WE THANK YOU FOR PIONEERING A WAY FOR SO MANY.
BECAUSE OF YOU, THERE IS A LIMIT BEYOND THE SKY, AND WE CAN ALL REACH THE STARS.
I AM HERE TO SHARE A LETTER FROM THE CONGRESSMAN TO ALL.
AND IT BEGINS, DEAR GUESTS, I'M HONORED -- I AM HONORED TO WELCOME YOU ALL TO THE OFFICIAL DEDICATION OF NASA LANGLEY
RESEARCH CENTER'S NEW KATHERINE
G. JOHNSON COMPUTATIONAL

RESEARCH FACILITY.
THIS IS A DESERVING TRIBUTE TO

HONOR KATHERINE'S MANY
ACCOMPLISHMENTS AND

CONTRIBUTIONS TO OUR NATION'S
SPACE PROGRAM.

KATHERINE BEGAN HER INCREDIBLE
CAREER HERE IN VIRGINIA'S SECOND

CONGRESSIONAL DISTRICT AT
NATIONAL ADVISORY COMMITTEE FOR

AERONAUTICS LANGLEY.
SHE ACCOMPLISHED SO MUCH DURING

HER TENURE AT NACA AND LATER
NASA, INCLUDING CALCULATING THE

FLIGHTS OF APOLLO 11 AND ALAN
SHEPHERD'S 1961 MERCURY FLIGHT.

THE FIRST FLIGHT OF AN AMERICAN
HERO INTO SPACE.

KATHERINE MADE TREMENDOUS
CONTRIBUTIONS TO OUR NATION'S

SPACE PROGRAM.
IT IS RIGHT THAT NASA LANGLEY'S
NEWEST BUILDING IS KATHERINE G. JOHNSON COMPUTATIONAL RESEARCH FACILITY.
MY WIFE TERRI JOINS ME IN WELCOMING TO THIS EVENT. WE ARE GRATEFUL THAT SO MANY OF YOU HAVE TAKEN THE OPPORTUNITY TO ATTEND AND SHARE YOUR SUPPORT.
MINDFUL THAT I WORK FOR YOU, I REMAIN YOURS IN FREEDOM,
CONGRESSMAN SCOTT RIGELL.
THANK YOU.
[ APPLAUSE ]

>> THANK YOU, SHANNON.
OUR NEXT SPEAKER -- AND PLEASE
THANK CONGRESSMAN RIGELL.

OUR NEXT SPEAKER IS THE HONORABLE CONGRESSMAN
BOBBY SCOTT, A LONG-TIME FRIEND OF OUR CENTER.
NOW IN HIS 12th TERM, CONGRESSMAN SCOTT SERVES AS THE RANKING MEMBER ON THE COMMITTEE ON EDUCATION AND THE WORKFORCE, WHERE HE LEADS THE FIGHT FOR ACCESS TO QUALITY EARLY, SECONDARY AND HIGHER EDUCATION FOR ALL OF AMERICA'S CHILDREN.

PLEASE JOIN ME IN WELCOMING CONGRESSMAN BOBBY SCOTT.

I'M CERTAINLY HONORED TO BE HERE WITH THE ELECTED OFFICIALS AND OTHER DISTINGUISHED GUESTS INCLUDING MY LONG-TIME FRIEND, JIM JOHNSON.

IT'S GOOD TO SEE YOU, JIM. AND AS WE'RE HERE TODAY TO CELEBRATE THE 55th ANNIVERSARY OF ALAN SHEPHERD BECOMING THE FIRST AMERICAN IN SPACE, AS WE CELEBRATE THE ACCOMPLISHMENTS OF
DR. JOHNSON AND DEDICATE THE KATHERINE G. JOHNSON COMPUTATIONAL RESEARCH FACILITY, SO THAT ALL OF HER ACCOMPLISHMENTS WILL BE RECOGNIZED NOT ONLY BY THOSE WHO KNEW HER BUT BY THOSE WHEN ARE ABLE TO TELL HER STORY, SO THAT WE’LL BE ABLE TO TELL HER STORY AND INSPIRE OTHERS. DR. JOHNSON HAS HAD A STORIED CAREER AT NASA, WORKING ON EVERY MANNED SPACEFLIGHT PROJECT FROM MERCURY THROUGH THE APOLLO, THROUGH THE SPACE SHUTTLE AND EVEN THE MANNED MISSION TO MARS. THOSE WHO GATHERED HERE TODAY ARE OBVIOUSLY AWARE OF HER ACCOMPLISHMENTS AND AWARDS INCLUDING THREE NASA SPECIAL ACHIEVEMENTS AWARDS, THE NASA APOLLO TEAM GROUP ACHIEVEMENT
AWARD, AND OF COURSE THE PRESIDENTIAL MEDAL OF FREEDOM.

WHILE SHE HAS HAD A LONG AND ILLUSTRIOUS CAREER HERE AT NASA,

SHE HAS ALSO HAD AN EQUALLY IMPORTANT IMPACT ON OUR COMMUNITY.

WE SEE THESE A TRUSTED ELDER AT CARVER PRESBYTERIAN CHURCH, THE LEADER AT THE NATIONAL ASSOCIATION.

AND YOU CAN SEE BY THE PINK AND GREEN IN THE AUDIENCE THAT SHE'S ALSO BEEN PRESIDENT OF THE LAMDO OMEGA CHAPTER OF THE ALPHA SORORITY.

AS MANY OF YOU KNOW, OUR KEYNOTE SPEAKER'S BOOK, "HIDDEN FIGURES," ON DR. JOHNSON AND OTHER AFRICAN-AMERICAN WOMEN'S WORK AT NASA CHRONICLES THE EARLY MANNED SPACEFLIGHT MISSIONS AND COMPUTATIONS THAT
THEY MADE TO MAKE THAT POSSIBLE.

AND WE LOOK FORWARD TO THAT -- THAT MOVIE.

TO BE HONEST, I ENJOY COMEDIES AND THRILLERS JUST LIKE

EVERYBODY ELSE, BUT FRANKLY, DR. JOHNSON'S STORY IS ONE THAT WE

OUR CHILDREN.

SHE BROKE DOWN NUMEROUS BARRIERS THROUGHOUT HER CAREER.

WHILE SHE PERSONALLY DID NOT REACH THE STARS LIKE THE

ASTRONAUTS WHOSE TRAJECTORIES SHE CALCULATED, HER CAREER CAME

MIGHTY CLOSE TO THOSE STARS. AND I'VE HEARD THAT YOU CAN

JUDGE A SOCIETY BASED ON THOSE THAT -- A SOCIETY BASED ON THOSE

THAT REMEMBER.

I'M THEY'RE MAKE SURE HER

CONTRIBUTIONS AREN'T FORGOTTEN.

BOTH NASA AND THE HAMPTON ROADS
COMMUNITY ARE FORTUNATE TO HAVE CALLED DR. JOHNSON ONE OF OUR OWN. I'M SURE I SPEAK FOR EVERYBODY HERE TO SAY THAT WE'RE ALL PROUD TODAY TO HONOR HER AND PAY TRIBUTES TO HER ACCOMPLISHMENTS AND CONTRIBUTIONS TO NASA OVER THE YEARS. THANK YOU, DR. JOHNSON, AND CONGRATULATIONS. [ APPLAUSE ] >> THANK YOU, CONGRESSMAN SCOTT. U.S. SENATOR TIM KAINE, A FORMER GOVERNOR OF VIRGINIA, COULDN'T BE WITH US TODAY, BUT HE WANTED TO SEND ALONG HIS CONGRATULATIONS IN THIS VIDEO MESSAGE. >> HI, I'M SENATOR TIM KAINE. UNFORTUNATELY I CAN'T BE HERE IN PERSON ON THIS SPECIAL OCCASION,
BUT I WANT TO THANK NASA LANGLEY RESEARCH CENTER FOR INVITING ME TO TAKE PART IN THIS GREAT EVENT.

MS. JOHNSON IS BEING RECOGNIZED TODAY BECAUSE OF HER INVALUABLE CONTRIBUTIONS TO OUR NATION'S SPACE PROGRAM DURING HER CAREER.

MS. JOHNSON'S WORK HELPED AMERICA SEND A MAN TO SPACE, AND THEN TO THE MOON.

THESE ADVANCES THEN PUSHED THE BOUNDARIES OF EXPLORATION AND PAVED THE WAY FOR OUR CURRENT GOAL OF REACHING MARS.

HER 33 YEARS OF SERVICE HELPED NASA TAKE GREAT STRIDES IN SCIENCE AND INNOVATION THAT HAVE NOT BEEN FORGOTTEN IN HER RETIREMENT. IN FACT, PEOPLE ARE STILL BUILDING UPON THE FOUNDATION THAT HER WORK LAID.
BUT, AS MANY HAVE SAID BEFORE ME, INCLUDING PRESIDENT OBAMA DURING HIS PRESENTATION OF THE MEDAL OF FREEDOM LAST YEAR, MS. JOHNSON'S IMPACTS ON OUR NATION STRETCH WELL BEYOND HER STELLAR MATHEMATICAL CALCULATIONS. JUST AS HER WORK CHALLENGED THE LIMITS OF OUR REACH BEYOND EARTH, HER CHARACTER CHALLENGED OUR WAY OF THINKING ABOUT WOMEN IN THE FIELDS OF SCIENCE, MATHEMATICS AND ENGINEERING. AS A PIONEER FOR WOMEN AND PEOPLE OF COLOR WISHING TO BREAK INTO NEW TECHNICAL FIELDS, MS. JOHNSON HAS SET A PROUD EXAMPLE FOR PEOPLE TO FOLLOW THEIR DREAMS, NO MATTER THE NORMS AND CONVENTIONS, AND TO REACH FOR THE STARS IN THEIR OWN
LIVES.

MS. JOHNSON MAY NOT HAVE FLOWN TO THE MOON HERSELF, BUT SHE IS A LIVING EXAMPLE OF HOW TO SHOOT FOR THE MOON.

MS. JOHNSON, THE COMMONWEALTH IS PROUD TO HAVE YOUR LEGACY AT NASA LANGLEY, AND I SEND MY BEST CONGRATULATIONS ON THESE WONDERFUL AWARDS AND DISTINCTIONS AND TO ALL WHO HAVE SUPPORTED YOU ALONG THE WAY.

[ APPLAUSE ]

AND NOW FOR OUR KEYNOTE SPEAKER.

MARGOT SHETTERLY, WHO IS ACCOMPANY ED HERE TODAY BY HER PARENTS, BOB AND MARGARET LEE -- [ APPLAUSE ]

IS NO STRANGER TO NASA LANGLEY.

HER FATHER WORKED AS A
RESEARCHER IN LANGLEY'S SCIENCE

AFTER GROWING UP WITH A FATHER WHO WAS AN ATMOSPHERIC SCIENTIST, AND A MOTHER WHO WAS A PROFESSOR OF ENGLISH AT HAMPTON UNIVERSITY, PERHAPS IT SHOULD COME AS NO SURPRISE THAT MARGOT BECAME SOMEBODY WHO WOULD WRITE ABOUT SCIENTISTS. AND WE'RE SO GLAD THAT SHE DID.

WE ARE VERY PLEASED THAT HER BOOK, AND THE MOVIE BASED ON IT, ARE SHINING SUCH A BRIGHT LIGHT ON THE ACCOMPLISHMENTS OF PEOPLE LIKE KATHERINE. PLEASE JOIN ME IN WELCOMING TODAY'S KEYNOTE SPEAKER, MARGOT SHETTERLY.

[ APPLAUSE ]

GOOD AFTERNOON TO EVERYONE,
BE HERE.
KATHERINE, I AM SO PROUD AND SO

THRILLED TO PARTICIPATE IN THIS WONDERFUL CEREMONY TODAY.

YOU HAVE DISTINGUISHED YOURSELF WITH OUTSTANDING WORK IN

MATHEMATICS AND COMPUTATION, SO IT'S ABSOLUTELY NATURAL AND

MAKES ALL THE SENSE IN THE WORLD THAT BUILDING SHOULD BEAR YOUR

NAME.
FIVE YEARS AGO, I SAT DOWN WITH

MRS. JOHNSON FOR THE FIRST TIME TO INTERVIEW HER ABOUT HER LIFE

AND CAREER.
WHAT'S HAPPENED SINCE THEN HAS

BEEN OVERWHELMING TO SAY THE LEAST.

HER STORY AND STORY OF WOMEN WHO SERVED OUR COUNTRY AS

MATHEMATICIANS HAS CAPTIVATED AMERICA.
THERE'S A REASON I NAMED THE BOOK "HIDDEN FIGURES."

00:30:48,549 --> 00:30:52,210
THEIR STORIES UNTIL THIS POINT HAD REALLY GONE UNRECOGNIZED AND

00:30:52,210 --> 00:30:55,779
UNTOLD, AND I'M VERY PROUD TO HAVE PLAYED A ROLE IN BRINGING

00:30:55,779 --> 00:31:00,869
THEIR STORIES TO THE PUBLIC WHERE THEY DESERVE TO BE.

00:31:00,869 --> 00:31:07,959
I WON'T MAKE VERY LONG REMARKS. WE'VE HEARD A LOT OF WORDS ABOUT

00:31:07,960 --> 00:31:11,210
MRS. JOHNSON.
WHAT I WANTED TO DO TODAY WAS TO

00:31:11,210 --> 00:31:15,529
USE HER WORDS TO TALK A LITTLE BIT ABOUT HER CAREER, HER WORK,

00:31:15,529 --> 00:31:18,889
AND SOME OF THE OTHER WOMEN THAT I'VE LEARNED ABOUT THROUGH HER

00:31:18,890 --> 00:31:22,360
BECAUSE MOST BRILLIANT PEOPLE HAVE RESPECT FOR OTHER BRILLIANT

00:31:22,359 --> 00:31:23,689
PEOPLE.
AND THAT'S ONE OF THE THINGS

00:31:23,690 --> 00:31:27,509
I'VE LEARNED FROM HER.
SO I AM LOOKING FORWARD TO

00:31:27,509 --> 00:31:30,619
SHARING MANY OF THE WORDS THAT SHE HAS SHARED WITH ME OVER THE
FIVE YEARS THAT I'VE GOTTEN TO KNOW ABOUT HER AND HER STORY.

AS YOU KNOW, SHE STARTED OUT IN THE WEST COMPUTING FACILITIES.

WE'VE TALKED ABOUT HERE EARLIER TODAY, THE GUESTS HAVE MENTIONED. THIS WAS A SEGREGATED FACILITY ORIGINALLY.

TWO WEEKS AFTER THAT, SHE WAS SENT TO THE FLIGHT RESEARCH DIVISION HERE AT NASA LANGLEY.

ANY TIME I'VE ASKED HER ABOUT THE PEOPLE THAT SHE WORKED WITH,

THE FIRST THING SHE SAYS IS THEY WERE BRAINY FOLKS, AND SHE JUST LOVED THOSE BRAINY PEOPLE.

[ LAUGHTER ]

OF COURSE, THE NAMES CHANGED OVER TIME, AND ONE OF THE THINGS I THINK IT'S IMPORTANT TO REMEMBER IS THOUGH MRS. JOHNSON
IS KNOWN FOR HER WORK ON THE
SPACE PROGRAM, SHE SPENT FOUR
YEARS WORKING ON AIRPLANE
SECURITY AND AIRPLANE
REGULATIONS AND TRYING TO MAKE
AIRPLANES SAFER.

SO THE NEXT TIME YOU GET ON AN
AIRPLANE, YOU SHOULD ALSO THINK
OF HER AND THINK OF THE PEOPLE
HERE AT NASA LANGLEY BECAUSE THE
AIR SAFETY THAT WE HAVE TODAY IS
DUE IN LARGE PART TO THEIR WORK,
AS WELL.
ONE OF THE THINGS THAT PEOPLE
ASK ME CONSTANTLY ABOUT THIS
BOOK AND ABOUT THE MOVIE IS WHY
HAVEN'T I HEARD THE STORY BEFORE.
I THINK ONE OF THE REASONS WHY
WE HAVEN'T HEARD IT, IT'S
BECAUSE OF THE MODESTY OF MRS.
JOHNSON AND THESE WOMEN WHO WERE
JUST DOING THEIR JOB.
AND I THINK MANY OF US WHO HAVE

HAD CONVERSATION WITH HER, WE ASK HOW DID IT FEEL TO BE SUCH

AN IMPORTANT PART OF HISTORY? WHAT DID YOU DO TO DEAL WITH THE

PRESSURE OF CALCULATING THESE VERY IMPORTANT CALCULATIONS?

SHE MODESTLY SAYS, "I WAS JUST DOING MY JOB."

WHAT I WANTED TO DO TODAY WAS TO SHOW YOU A LITTLE IT WHAT THAT

JOB ACTUALLY ENTAILED. SO AS YOU CAN SEE HERE, ON THE LEFT, SEPTEMBER, 1960, THIS IS

THE RESEARCH REPORT THAT DETAILED THE ORBITAL EQUATIONS THAT THE GROUP THAT SHE WAS IN,

THE AEROSPACE MECHANICS GROUP, USED TO PUT A MAN INTO ORBIT.

AND YOU CAN SEE SOME OF THE PAGES THERE FROM THE
PRESENTATION.

NOW, IMAGINE, IF YOU CAN SEE

THESE EIGHT PAGES, IMAGINE
SOMETHING THAT IS 150 PAGES OF

THAT, AND YOU HAVE TO CHECK IT
USING THIS MACHINE ON THE LEFT.

THIS IS THE WORK THAT SHE WAS
ASKED TO DO IN THE COUNTDOWN TO

THE FLIGHT IN WHICH JOHN GLENN
TOOK A HUGE STEP AND WAS THE

FIRST AMERICAN TO ORBIT THE
EARTH.

THAT'S PRESSURE.

BUT MRS. JOHNSON STOOD UP TO

HER NUMBERS WERE RIGHT, AND THEY

USED HER NUMBERS TO HELP
CALIBRATE AND CHECK THE

COMPUTERS WHICH WERE NEW AT THAT
TIME.

AN ELECTRONIC COMPUTER, YOU
CAN'T LOOK IN THE EYE.
A HUMAN COMPUTER, YOU CAN.
YOU CAN ASK QUESTIONS.

THAT'S ONE OF THE REASONS WHY
THEY ASKED THIS BRILLIANT WOMAN

TO MAKE SURE THAT EVERYTHING WAS
IN ORDER BEFORE JOHN GLENN TOOK

OFF FOR THE HEAVENS.
IT WASN'T VERY LONG INTO MY

CONVERSATIONS WITH MRS. JOHNSON
BEFORE I HEARD THE NAME DOROTHY

LAW -- DOROTHY VAUGHN.
I HEARD IT OVER AND OVER AGAIN.

I ASKED HER, WHO'S DOROTHY

SHE SAID, DOROTHY VAUGHN WAS MY
ORIGINAL SUPERVISOR.

WHEN SHE WAS SENT ORIGINALLY TO
THE WEST COMPUTING AUDIENCE, IT

WAS JUST TWO WEEKS, BUT SHE
WORKED FOR MRS. DOROTHY VAUGHN.

NO DOROTHY VAUGHN CAME HERE TO
HAMPTON ROADS DURING WORLD WAR

SHE WAS A MATH TEACHER AT ROBERT
MOTON HIGH SCHOOL WHICH GAINED A MEASURE OF FAME ALSO IN ITS ROLE LEADING UP TO THE BROWN VS. BOARD OF EDUCATION DECISION.

MRS. VAUGHN WAS THE HEAD OF THE GROUP CALLED THE WEST COAST COMPUTERS. MRS. JOHNSON HAS TOLD ME MANY TIMES ABOUT THE RESPECT THAT SHE HAD FOR MRS. VAUGHN AND FOR HER TALENT. WHAT SHE SAID OVER AND OVER IS, DOT VAUGHN OF THE SMARTEST OF ALL THE GIRLS.

SO HERE'S AN EXAMPLE HERE OF MRS. VAUGHN'S WORK.

AS A SUPERVISOR -- AND SHE WAS PROMOTED IN 1951 TO THE HEAD OF THE WEST AREA COMPUTING GROUP.

PER MY RESEARCH, I BELIEVE THAT MAKES HER THE FIRST AFRICAN-AMERICAN SUPERVISOR IN
THE HISTORY OF NASA.
NOW, THIS IS IN 1951.

I THINK IT'S VERY IMPRESSIVE.
HERE'S AN EXAMPLE OF MRS. VAUGHN'S WORK.
SHE WAS DRAFTED TO HELP CONSULT ON A HANDBOOK USING ALGEBRAIC METHODS ON THE FRIEDEN -- USING ALGEBRAIC METHODS ON THE FRIEDEN AND ALGORITHM MACHINES.
PRETTY IMPORTANT WHEN YOU CONSIDER THAT THEY FORM ALL THE RESEARCH AND LATER SPACE RESEARCH THAT WAS DONE HERE AT THE CENTER.

SHE WAS APPOINTED TO HEAD THIS GROUP. MARJORIE WAS SOMEBODY WHO TOOK THIS ASSIGNMENT VERY SERIOUSLY. SHE TREATED THE WOMEN IN HER GROUP AS EQUALS. AND THIS IS SOMETHING THAT WE TAKE FOR GRANTED NOW. SHE ACTUALLY SOCIALIZED WITH THE WOMEN IN HER GRUMP -- HER GROUP. SHE INVITED THEM TO HER HOME. THERE WAS -- THIS WAS A BIG DEAL IN THOSE DAYS. SHE WAS ALSO A VERY GOOD MATHEMATICIAN. IN 1948 SHE CO-AUTHORED A REPORT WITH SAM CTASOFF. I'M SURE PEOPLE REMEMBER HIS NAME. HE WENT ON TO BECOME THE CHIEF SCIENTIST AT NASA LANGLEY. IN 1948, MARJORIE HANNAH WAS MOVED TO THE FULL SCALE, AND SHE
AND SAM KATSOFF CO-AUTHORED A REPORT.

SHE WENT ON TO CO-AUTHOR ANOTHER REPORT.

SHE WAS MOVED OVER TO MRS. JOHNSON'S DIVISION AND CO-AUTHORED ANOTHER REPORT WITH AN ENGINEER ON SOMETHING CALLED THE GRAND TOUR OF THE OUTER PLANETS.

THIS OF THE IDEA THAT A SPACESHIP WOULD LEAVE THE EARTH AND HOP FROM MARS TO SATURN ATTORNEY JUPITER USING THE GRAVITY OF EACH PLANET TO SLINGSHOT IT TO ANOTHER PLANET.

SHE RECEIVED AN AWARD FOR THIS IN 1970.

WHEN I MENTIONED HER NAME TO MRS. JOHNSON, SHE SAID THAT SHE THOUGHT MARJORIE HANNAH WAS SOMEBODY WHO HADN'T RECEIVED THE
CREDIT THAT SHE DESERVED.
SO WHAT I WANTED TO DO TODAY WAS

503
00:38:12,150 --> 00:38:15,630
TO MENTION HER NAME TO YOU SO
THAT YOU GUYS KNOW WHAT WORK SHE

504
00:38:15,630 --> 00:38:21,420
DID.
NOW HERE'S SOMEBODY WHOSE NAME

505
00:38:21,420 --> 00:38:23,588
AND FACE I THINK IS VERY
FAMILIAR TO US --

506
00:38:23,588 --> 00:38:30,048
[ APPLAUSE ]
DR. CHRISTINE DARDEN.

507
00:38:30,048 --> 00:38:31,659
SHE WASN'T ABLE TO BE HERE
TODAY.

508
00:38:31,659 --> 00:38:35,179
SHE'S IN COLORADO VISITING HER
GRANDCHILDREN.

509
00:38:35,179 --> 00:38:38,629
SHE STARTED OUT IN 1967 AT THE
CENTER.

510
00:38:38,630 --> 00:38:42,210
THIS WAS AT THE VERY END OF THE
COMPUTING POOL.

511
00:38:42,210 --> 00:38:46,070
AND DR. DARDEN STARTED WHAT WAS
CALLED AT THE TIME A DATA

512
00:38:46,070 --> 00:38:50,359
ANALYST, WHICH IS SORT OF THE
NAME FOR THE WORK THAT THE WOMEN

513
00:38:50,358 --> 00:38:51,451
DID.
IT CHANGED OVER TIME.
IT WAS COMPUTERS, SOMETIMES IT WAS MATHEMATICIAN, MATH AIDES,
THERE WERE DIFFERENT WORDS AND DIFFERENT NAMES FOR THAT WORK
OVER TIME.
BUT WHAT DR. DARDEN REALLY WANTED TO DO WAS TO BE AN ENGINEER, AND TO DO HER OWN RESEARCH.
SO AFTER A COUPLE OF YEARS IN THE COMPUTING POOL, SHE WENT TO HER DIVISION CHIEF.
AND I THINK THOSE OF YOU WHO ARE HERE AT NASA AND WHO UNDERSTAND THE HIERARCHY CAN JUST IMAGINE THE IDEA OF SOMEBODY WHO'S A DATA ANALYST WHO'S BEEN HERE FOR FOUR YEARS GOING TO THE DIVISION CHIEF, A PRETTY IMPORTANT PERSON.
WHAT SHE SAID WAS, I DON'T UNDERSTAND WHY IS IT THAT WOMEN
WHO COME IN HERE ARE HIRED AS DATA ANALYSTS, WHEREAS MEN ARE HIRED AS ENGINEER.
WHAT I WANT TO DO IS I WANT TO DO MY OWN RESEARCH.
I WANT THE SAME PRIVILEGES THAT THE MEN HAVE.
YOU AND WHY IS THIS?

SO THE DIVISION CHIEF DIDN'T REALLY HAVE A GOOD ANSWER TO THAT.
BUT TWO WEEKS LATER, HE MADE THE
TRANSFER, AND DR. DARDEN WAS ABLE TO CONTINUE HER OWN RESEARCH, START HER OWN RESEARCH.

AND ON THE LEFT, YOU'LL SEE THE COVER FROM HER PIONEERING REPORT IN 1975.
AND SO WHAT SHE DID, AND THIS

WAS A TIME WHEN COMPUTERS REALLY WERE COMING INTO USE HERE AND

NOT JUST SPACE BUT ALSO IN
AERONAUTICAL RESEARCH.

00:40:15,440 --> 00:40:20,619
SHE MODELED THE SONIC BOOM.
THE CRACK THAT WE HEAR LIKE

00:40:20,619 --> 00:40:26,269
THUNDER CLAPS WHEN A VEHICLE
SUPERSEDES THE SPEED OF SOUND.

00:40:26,269 --> 00:40:32,998
HER MODEL IS STILL THE BASIS FOR
INDUSTRY STANDARD SONIC BOOM

00:40:32,998 --> 00:40:36,879
SOFTWARE THAT'S STILL USED IN
THE INDUSTRY TODAY.

00:40:36,880 --> 00:40:40,460
AND SHE IS SOMEBODY WHEN --
THERE ARE MANY TIMES WHEN I TALK

00:40:40,460 --> 00:40:43,039
TO MRS. JOHNSON AND I WOULD ASK
ABOUT HER WORK.

00:40:43,039 --> 00:40:48,028
SHE WOULD SAY, NO, I WANT TO
TALK ABOUT CHRISTINE DARDEN.

00:40:48,028 --> 00:40:51,349
SHE SAID TO ME -- AND YOU KNOW
THAT MRS. DARDEN GOES INTO

00:40:51,349 --> 00:40:56,180
SCHOOLS.
SHE'S EXTREMELY ENERGETIC ABOUT

00:40:56,179 --> 00:40:58,989
GETTING STUDENTS INTERESTED IN
S.T.E.M. CAREERS.

00:40:58,989 --> 00:41:02,960
SHE SAID, I MENTION CHRISTINE
DARDEN EVERY CHANCE I GET
BECAUSE SHE IS A MODEL OF HOW FAR MATHEMATICAL TALENT CAN TAKE YOU.

NOW IF ALL THE WORDS THAT I'VE HEARD MRS. JOHNSON SAY, AND AT THIS POINT THERE ARE MANY, AND THERE HAVE SO MANY INTERESTING THINGS I'VE LEARNED FROM HER AND FROM HER, I THINK THE ONE THAT STAYS WITH ME MOST IS THIS -- AND WE'VE HEARD IT MENTIONED HERE A LITTLE BIT EARLIER.

YOU ARE NO BETTER THAN ANYONE ELSE, AND NO ONE IS BETTER THAN YOU. I THINK IT'S TEMPTING FOR US TO FOCUS ON THE PART OF NO ONE IS BETTER THAN YOU. I THINK THE REAL SUBTLETY AND THE MEAT AND POWER OF THE STATEMENT IS THE PART THAT SAYS, YOU ARE NO BETTER THAN ANYONE.
ELSE.
AND REALLY, THIS IS ONE OF THE

560
00:41:50,440 --> 00:41:54,470
REASONS WHY MRS. JOHNSON'S STORY
HAS CAPTIVATED US.

561
00:41:54,469 --> 00:41:58,509
SHE HAS SUCH A TOWERING TALENT,
BUT SHE'S GONE OUT OF HER WAY TO

562
00:41:58,510 --> 00:42:01,990
RECOGNIZE TALENT IN OTHER
PEOPLE, REGARDLESS OF THEIR

563
00:42:01,989 --> 00:42:05,528
GENDER, OF THEIR RACE, OF THEIR
BACKGROUND.

564
00:42:05,528 --> 00:42:08,239
IF YOU'RE A SMART PERSON, THEN,
YOU KNOW, SHE WANTS TO HAVE A

565
00:42:08,239 --> 00:42:12,379
CONVERSATION WITH YOU.
AND SHE SEES YOU AS AN EQUAL.

566
00:42:12,380 --> 00:42:15,910
THAT IS SOMETHING, A GREAT
LESSON THAT I HAVE LEARNED.

567
00:42:15,909 --> 00:42:18,548
KATHERINE, THANK YOU VERY MUCH
FOR EVERYTHING THAT YOU'VE GIVEN

568
00:42:18,548 --> 00:42:22,280
US, FOR WHAT YOU'VE GIVEN ME.
THANK YOU FOR YOUR CAREER, FOR

569
00:42:22,280 --> 00:42:26,588
SHINING ON THE TALENTS OF OTHER
PEOPLE, AND CONGRATULATIONS FOR

570
00:42:26,588 --> 00:42:39,880
THIS WELL-DESERVED HONOR.
[ APPLAUSE ]
>> THANK YOU, MARGOT.  
>> GYM I'M GOING TO GO OFF

SCRIPT HERE A LITTLE BIT. YOU'VE HEARD US MENTION ALAN SHEPHERD'S FLIGHT AND JOHN GLENN'S FLIGHT.

YOU'VE HEARD US MENTION IT SEVERAL TIMES.

THAT'S NOT BECAUSE WE DIDN'T HAVE ENOUGH MATERIAL TO ADD,

THAT'S BECAUSE OF HOW IMPRESSED WE ARE.

THOSE OF US THAT DO THIS AND HAVE THOSE 40,000-FOOT FACILITIES WITH LARGE COMPUTERS AND COMPUTATIONAL TOOLS, WE ARE COMPLETELY BLOWN AWAY AND AWED BY WHAT YOU AND YOUR COLLEAGUES DID.

WE'D LIKE TO THANK YOU AGAIN FOR THAT. [ APPLAUSE ]
AT THIS TIME, I'D LIKE TO CALL FORWARD MEL FEREBEE, AND THE DIRECTOR OF OUR CENTER OPERATIONS DIRECTORATE,


HER INCOMPARABLE MATHEMATICAL SKILLS INFLUENCED EVERY MAJOR SPACE PROGRAM FROM MERCURY THROUGH SPACE SHUTTLE. SHE IS KNOWN ESPECIALLY FOR THE
CALCULATIONS OF THE

1961 TRAJECTORY FOR ALAN SHEPARD'S MERCURY

SPACECRAFT FLIGHT, FIRST AMERICAN IN SPACE, THE

VERIFICATION OF JOHN GLENN'S 1962 MERCURY SPACECRAFT FLIGHT,

THE FIRST FLIGHT CALCULATION MADE BY AN ELECTRONIC COMPUTER,

AND THE 1969 APOLLO 11 FLIGHT TO THE MOON.

DURING A CEREMONY AT THE WHITE HOUSE IN 2015, PRESIDENT

BARACK OBAMA PERSONALLY AWARDED HER THE PRESIDENTIAL MEDAL OF

FREEDOM, OUR NATION'S HIGHEST CIVILIAN HONOR.

KATHERINE, ON BEHALF OF NASA ADMINISTRATOR CHARLIE BOLDEN,

ALL OF THE EMPLOYEES HERE AT NASA LANGLEY, AND ALL NASA

EMPLOYEES PAST, PRESENT AND FUTURE, I WOULD LIKE TO PRESENT
YOU WITH THIS REPLICA OF THE PLAQUE.

[ APPLAUSE ]
KATHERINE, THIS PLAQUE WILL BE PERMANENTLY MOUNTED IN THE BUILDING'S LOBBY AS A REMINDER OF ALL YOUR AMAZING CONTRIBUTIONS.

LADIES AND GENTLEMEN, BEFORE WE #NAME?

>> THANK YOU.
ON BEHALF OF THE BOARD OF DIRECTORS LED BY DR. DOROTHY BUCHANAN WILSON AND THE 300,000 LADY OF ALPHA KAPPA ALPHA SORORITY, INC., IT IS MY HONOR TO PRESENT THESE ROSES TO OUR SORORITY MEMBER, DR. KATHERINE JOHNSON.

[ APPLAUSE ]

>> LADIES AND GENTLEMEN, BEFORE WE
CONCLUDE TODAY’S CEREMONY THERE IS ONE LAST PIECE OF OFFICIAL BUSINESS WE HAVE TO TAKE CARE OF.

KATHERINE PLAYED A PIVOTAL ROLE IN THE SUCCESS OF OUR NATION’S HUMAN SPACEFLIGHT PROGRAM. SOME OF THE KEY HUMANS INVOLVED IN THAT PROGRAM ARE THE ASTRONAUTS THEMSELVES.

PERHAPS MORE SO THAN ANYONE ELSE IT’S OUR NASA ASTRONAUTS WHO HAVE AN IMMENSE APPRECIATION FOR WHAT IT TAKES TO GET THEM INTO SPACE AND SAFELY HOME AGAIN, WHICH MIGHT BE WHY THE NASA ASTRONAUT CORPS CREATED A SPECIAL AWARD TO RECOGNIZE THOSE WHO HELP THEM DO THE AMAZING THINGS THAT THEY DO -- THE SPACE FLIGHT AWARENESS SILVER SNOOPY AWARD.

AT THIS TIME I’D LIKE TO INTRODUCE RETIRED ASTRONAUT AND
FORMER NASA LANGLEY ENGINEER LELAND MELVIN.


HE RETIRED FROM NASA IN FEBRUARY 2014.

PLEASE JOIN ME IN WELCOMING LELAND TO THE STAGE.

GOOD AFTERNOON, EVERYONE.

THIS IS A VERY, VERY BEAUTIFUL DAY.

Hey, Katherine. [Laughter]

IT WASN’T LIKE SHE WAS RETIRED BECAUSE I SAW HER ALL THE TIME AT MTA CONVENTIONS AND DOING MATH CONTESTS, INSPIRING YOUNG GIRLS AND YOUNG BOYS TO BE GREAT MATHEMATICIANS AND S.A.T.

SO SHE HELPED MOLD MY CAREER AND MENTORED ME AT A VERY YOUNG AGE AS A PROFESSIONAL HERE AT NASA LANGLEY.

SO I’M JUST VERY HONORED AND PROUD TO HAVE ON NATIONAL ASTRONAUT DAY BEING THE
RECIPIENT OF THE WORK THAT SHE

651
00:50:22,309 --> 00:50:26,039
DID TO GET ME TO SPACE SAFELY.
AND I SAY THAT KATHERINE HAS

652
00:50:26,039 --> 00:50:31,549
BEEN -- I CALL THIS A SHERO OF
MI NE, FOR A VERY LONG TIME.

653
00:50:31,548 --> 00:50:35,818
AND HER DEDICATION, HER
EXCELLENT TO PROFESSIONALISM AND

654
00:50:35,818 --> 00:50:40,568
SOCIAL BARRIERS THAT SHE BROKE,
AND FOR HER ONGOING COMMITMENT

655
00:50:40,568 --> 00:50:45,630
TO INSPIRING THE FUTURE
EXPLORERS LIKE MYSELF.

656
00:50:45,630 --> 00:50:50,329
ASTRONAUT JEANNETTE EPPS WILL BE
THE FIRST AFRICAN-AMERICAN

657
00:50:50,329 --> 00:50:55,099
FEMALE TO FLY FROM KAZAKHSTAN TO
THE INTERNATIONAL SPACE STATION

658
00:50:55,099 --> 00:50:58,528
FOR A SIX-MONTH TOUR.
SO THE LEGALLY THAT KATHERINE

659
00:50:58,528 --> 00:51:02,710
JOHNSON HAS GIVEN US WILL HELP
THE FIRST AFRICAN-AMERICAN WOMAN

660
00:51:02,710 --> 00:51:08,619
BE ON THE INTERNATIONAL SPACE
STATION IN A FEW YEARS.

661
00:51:08,619 --> 00:51:14,769
AND THAT'S A TESTAMENT TO HER
WORK.
662
00:51:14,768 --> 00:51:16,098
[ APPLAUSE ]
AS CLAYTON TURNER MENTIONED, THE

663
00:51:16,099 --> 00:51:19,210
SILVER SNOOPY IS A SPECIAL NASA
AWARD GIVEN FOR PROFESSIONAL

664
00:51:19,210 --> 00:51:22,470
EXCELLENCE IN VITAL
CONTRIBUTIONS TO THE HUMAN

665
00:51:22,469 --> 00:51:26,778
SPACEFLIGHT PROGRAM.
IT IS ALWAYS GIVEN BY A MEMBER

666
00:51:26,778 --> 00:51:30,318
OF THE ASTRONAUT CORPS.
BY THE WAY, WE HAVE ANOTHER

667
00:51:30,318 --> 00:51:33,909
MEMBER POSSIBLY IN THE AUDIENCE
IN NASA LANGLEY, DR. CHARLIE

668
00:51:33,909 --> 00:51:36,818
KAMATA.
IS CHARLIE HERE?

669
00:51:36,818 --> 00:51:39,889
YEAH, ONE MORE TIME.
HE WAS SUPPOSED TO BE HERE, BUT

670
00:51:39,889 --> 00:51:42,679
HE WASN'T ON TIME.
CHARLIE GOT INTO THE ASTRONAUT

671
00:51:42,679 --> 00:51:46,190
CORPS AND THEN INSPIRED ME TO
JOIN SOON AFTER THAT.

672
00:51:46,190 --> 00:51:49,818
I WANTED TO GIVE PROPS TO HIM.
ANOTHER LANGLEY GUY.

673
00:51:49,818 --> 00:51:55,038
THOSE OF US COMPRISING NASA
FLIGHT CREWS, ESPECIALLY THE

674
00:51:55,039 --> 00:52:01,170
EARLY HEROES OF SPACEFLIGHT,
SHEPHERD, GLENN, CRUZ OF APOLLO

675
00:52:01,170 --> 00:52:06,450
11, AND THE MAIDEN VOYAGE OF
SPACE SHUTTLE COLUMBIA,

676
00:52:06,449 --> 00:52:10,088
RECOGNIZE THAT THE SUCCESS OF
EACH MISSION IS MEASURED BY THE

677
00:52:10,088 --> 00:52:14,670
DEDICATION TO EXCELLENCE AND
TEAMWORK OF SUCH PEOPLE LIKE

678
00:52:14,670 --> 00:52:17,880
KATHERINE.
HER EFFORTS DEMONSTRATED THAT

679
00:52:17,880 --> 00:52:22,548
SHE WAS A VITAL LINK IN THE
SUCCESS OF OUR SPACE PROGRAMS.

680
00:52:22,548 --> 00:52:25,420
AND WE THANK YOU FOR MANY
CONTRIBUTIONS.

681
00:52:25,420 --> 00:52:27,920
KATHERINE PLAYED A KEY ROLE IN
THIS EFFORT SINCE THE EARLIEST

682
00:52:27,920 --> 00:52:31,440
DAYS OF ASTRONAUT TRAVEL UNTIL
HER RETIREMENT FROM NASA

683
00:52:31,440 --> 00:52:36,030
LANGLEY.
KATHERINE, IT IS MY PLEASURE TO

684
00:52:36,030 --> 00:52:39,720
PRESENT THE STERLING SILVER
SNOOPY TO YOU IN APPRECIATION
FOR YOUR EXCEPTIONAL SERVICE IN CALCULATING TRAJECTORIES IN ORBITS OF AMERICA'S PIONEERING SPACEFLIGHTS.

YOU DEMONSTRATED THE TECHNICAL COMPETENCE, DEDICATION, AND PRIDE THAT GUARANTEE MISSION SUCCESS.

THIS SILVER SNOOPY PIN WAS FLOWN ABOARD SPACE SHUTTLE ATLANTIS IN 2009 DURING MY SECOND MISSION, STS-129.

I'M HONORED TO BESTOW THIS RECOGNITION AS SUCH, ON SUCH A WORTHY RECIPIENT AND DEAR FRIEND, DR. KATHERINE G.

MONTHS AGO, I GAVE KATHERINE MY FLOWN PIN BECAUSE SHE HAD NOT
BEEN GIVEN A PIN YET. NOW WE'RE GOING TO SWAP PINS

WITH THE SILVER SNOOPY THAT I'M GOING TO GIVE YOU RIGHT NOW.

THIS IS A LETTER OF APPRECIATION FOR PROFESSIONALISM, DEDICATION,

AND OUTSTANDING SUPPORT THAT GREATLY ENHANCED SPACEFLIGHT

SAFETY AND MISSION SUCCESS. IN RECOGNITION OF THESE

ACHIEVEMENTS AND AS A SYMBOL OF OUR SPECIAL THANKS, THE

ASTRONAUT TEAM PRESENTS ASTRONAUT'S PERSONAL ACHIEVEMENT

AWARD TO KATHERINE G. JOHNSON, MAY 5th, 2016, ON ASTRONAUT DAY.

I'VE ENJOYED RECEIVING THEM. AND THEY TELL ME YOU'RE GOING TO

PUT A ROOM TO PUT THEM IN.
WELL, I DO THANK YOU VERY MUCH FOR YOUR ATTENTION, FOR YOUR KIND NOT.

MORE THAN THAT I'M SO HAPPY FOR GIVING MORE RECOGNITION TO WOMEN. ALL THE WORK THAT THEY'VE DONE.

WHEN THEY NOTICED TO WRITE DOWN WHAT I HAD WORKED ON.

I THINK I HAD 20 PAGES. AT THE TIME IT WAS JUST ANOTHER DAY'S WORK.

I HAVE ALWAYS DONE MY BEST, AND I ASK THE YOUNG LADIES HERE WHO ARE INTERESTED IN MAJORING IN MATH, THAT'S WHAT YOU LIKE ABOUT MATH, IT GIVES YOU A RIGHT AND A WRONG. THE BEST THEME IN THE WORLD, BUT WHO'S GOING TO SAY WHO WROTE IT, YOU KNOW.
BUT IF YOU'VE GOT AN ANSWER TO A PROBLEM THAT SOMEBODY ELSE HAS WORKED ON, YOURS IS THE ANSWER. THAT IS IMPORTANT.

SO I THANK YOU FOR RECOGNIZING THAT WOMEN HAVE LONG BEEN DOING A LOT OF THE WORK.

[ LAUGHTER ]

[ APPLAUSE ]

>> AMEN.

AND YOU WOULD JUST LOOK AT ME AND SEE -- AND YOU DO YOUR SHARE, DO YOUR BEST AT ALL TIMES, TOO, BECAUSE YOU LIKE IT.

I LIKE WORK.
I LIKE LEARNING.

THERE'S A BOY WHOSE FATHER IS HERE, WHO IS GOING TO TEACH ME SPANISH BECAUSE I SPOKE -- I WANTED TO SPEAK SPANISH.

WE'RE ALL SPEAKING SPANISH. EVERY TIME HE COMES TO SEE ME WHICH IS NECESSARILY OFTEN NOW
I have moved, but he comes and gives me a Spanish lesson knowing that I like learning.

So I ask you to enjoy learning, want to learn, and you will do it, and you will use every bit of it at some time.

Who would have thought that 50 years ago when they asked me how far were we on a moon on a certain day, I could open a no confidence votebook and tell him.

You could do it easily enough. All the time somebody want to know something help them.

Help anybody you can help. You never know who you are helping, but they will appreciate it, and so will you later.

Thanks again for everything.
YOU'RE WELCOME.
YOU'VE GIVEN ME.

THANK YOU, THANK YOU.
[ APPLAUSE ]

NEXT YEAR WE CELEBRATE OUR CENTENNIAL, THE FIRST NASA CENTER TO DO SO.
FOR ALMOST 100 YEARS IT HAS BEEN

PEOPLE LIKE KATHERINE, AND THEIR CURIOSITY, PASSION AND BRILLIANCE THAT HAVE HELPED TO SOLVE SOME OF THE MOST DIFFICULT CHALLENGES OF OUR TIME.
WE TAKE IMMENSE PRIDE IN THE WORK OF THOSE WHO CAME BEFORE US, AND WE CELEBRATE OUR STORIED PAST BY HONORING THEM AND THEIR ACCOMPLISHMENTS.

WE ARE ALSO INCREDIBLY EXCITED ABOUT OUR SOARING FUTURE.

THE KATHERINE G. JOHNSON COMPUTATIONAL RESEARCH FACILITY
WILL HELP CARRY THIS CENTER, ITS
PEOPLE AND THE AWE-INSPIRING

01:00:22,690 --> 01:00:25,420
WORK THAT WE DO INTO THE NEXT
CENTURY.

01:00:25,420 --> 01:00:28,420
KATHERINE, THANK YOU IS NOT
ENOUGH.

01:00:28,420 --> 01:00:48,858
THANK YOU VERY MUCH.
[ APPLAUSE ]

01:00:48,858 --> 01:00:50,670
LADIES AND GENTLEMEN, THIS
CONCLUDES OUR CEREMONY.

01:00:50,670 --> 01:00:53,559
THANK YOU FOR COMING AND PLEASE
JOIN US FOR A RECEPTION TO

01:00:53,559 --> 01:00:54,640
CONTINUE THE CELEBRATION OF
TODAY’S ANNOUNCEMENT.

01:00:54,639 --> 01:01:02,858
WE HAVE CAKE AND PUNCH -- CAKE,
IT'S SOUTHERN, NOT BEING CHEAP.

01:01:02,858 --> 01:01:04,328
THANK YOU FOR COMING.
THANK YOU.