

# A (VERY BRIEF) HISTORY of NASA



Here's a quick breakdown of some of the missions that made us rock stars of the space world.

## 1. FREEDOM 7 (1961)

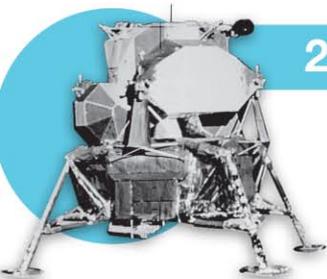
The one that started it all. This was the mission that put the first human into outer space for a whopping 15 minutes ... that's like 500 years in today's terms.\*

\*Not really, but it was **HUGE** back then!



## 2. APOLLO 11 (1969)

Our first "giant leap for mankind," the Apollo missions to the Moon brought about a new era in space exploration and cool new words like "moonwalking."



## 3. SPACE SHUTTLE (1981)

This series of spacecraft was the first with the ability to make a controlled landing (kind of like an airplane) while reentering Earth's atmosphere.



## 4. HUBBLE TELESCOPE (1990)

Massive black holes, planet-eating stars, and galactic collisions are just a sample of firsts that we've seen through the Hubble lens, and there's a lot more space to see.



# GET READY TO ROCK THE HOUSE!



All of this awesome NASA stuff still not enough? Well, you can download a free version of the "NASA Anthem" by (who else) the musical group N.A.S.A. simply by scanning the QR code below with your mobile phone or by visiting [spaceflightsystems.grc.nasa.gov/nasaanthem](http://spaceflightsystems.grc.nasa.gov/nasaanthem).



National Aeronautics and Space Administration

Glenn Research Center  
21000 Brookpark Road  
Cleveland, OH 44135

[www.nasa.gov](http://www.nasa.gov)

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National Aeronautics and  
Space Administration



# YOU'RE WELCOME



A look at the  
**NASA** technology  
that has changed  
our lives.



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## SO YOU THINK YOU KNOW NASA?

Sure, everyone knows how we are pioneers in the space exploration game and all about our awesome missions to the Moon and beyond. But we do some pretty amazing things here on Earth also.

They're called  
"spinoffs,"

HERE'S  
HOW  
THEY  
WORK

1. NASA develops an awesome technology (and we have a lot).
2. The technology is adapted for you (the adoring public) to use.
3. Wash, rinse, repeat.

*Pretty simple, right?*

(Put it this way)  
What we do in  
**SPACE**  
is much more than just  
**SCIENCE.**

— Dr. Howard Ross

What we mean is what good is any of the science if you don't actually *USE IT*?

**That's why** NASA technologies have been applied to everyday things like:



- Infrared Ear Thermometers
- Artificial Limbs
- Aircraft Anti-Icing Systems
- Highway Safety Grooving
- Improved Radial Tires
- Chemical Detection
- Fire-Resistant Reinforcement
- Firefighting Equipment
- Memory Foam
- Enriched Baby Food
- Portable Cordless Vacuums
- Freeze-Drying Technology
- Water Purification
- Solar Energy

**SOUND FAMILIAR?**

Yeah, we thought so. The list doesn't end here though. We've got a lot more in store — so stay tuned.

Because when we talk about "the future of NASA," it's not all just *rocket launches and stargazing ...*

**WE'RE LOOKING AT YOU.**

The ideas floating around in your heads right now are what will propel NASA's innovations in the years to come (*no pressure though*).

So don't just sit there in wide-eyed amazement ...

**GET INVOLVED**



There are a **ton** of ways to become involved with NASA. From internships to summer workshops, there's always a way to get more of that NASA you've been craving. So talk to your school advisor, or go to [www.nasa.gov/education](http://www.nasa.gov/education) to find out more.



# THANK US LATER

Spinoffs are technologies designed by NASA that have been adapted for the general public (that's you) to use in everyday life. Trust us, there are a ton of them out there, too many to fit onto one poster. So here are just a few of the awesome things NASA has passed on to you. **YOU'RE WELCOME!**

Advanced Lenses

Acoustic Instruments

Communications Satellites

Memory Foam

Athletic Shoes

Invisible Braces

We laugh in the face of  
**UV RAYS**



Based on technology originally developed by NASA, companies have created special lenses, some of which filter out harmful radiation while others are scratch-resistant.

**How cool is that?!**

Turn it up to

**11**

Did you ever think NASA would be connected to the music industry? **Think again.** KMI Music Inc., utilizes advanced vibration research to create superior sounding acoustic instruments, **so feel free to ROCK!**



## Sports & Space **COLLIDE**



Memory foam was originally created by a NASA contractor as padding for aircraft seats. This padding offered better impact protection and **enhanced passenger comfort.** Seeing the benefits of this material, companies began using it in everything from football helmets to mattresses.



## Super **SNEAKERS**

**Feel a little bounce in your step?**

Some athletic shoe companies have taken NASA technology and used it to construct better shoes that lessen the impact on your feet and legs.

It's for **YOU**

Some of the 200 or more **communication satellites** currently orbiting the Earth contain components originally developed by NASA, allowing us to call or text to anyone on the globe from Boston to Beijing.



Say  
**CHEESE!**

Invisible braces are made of translucent polycrystalline alumina (we just call it TPA). The companies 3M and Ceradyne first created TPA in conjunction with NASA's Advanced Ceramics Research to **protect infrared antennae.**

