

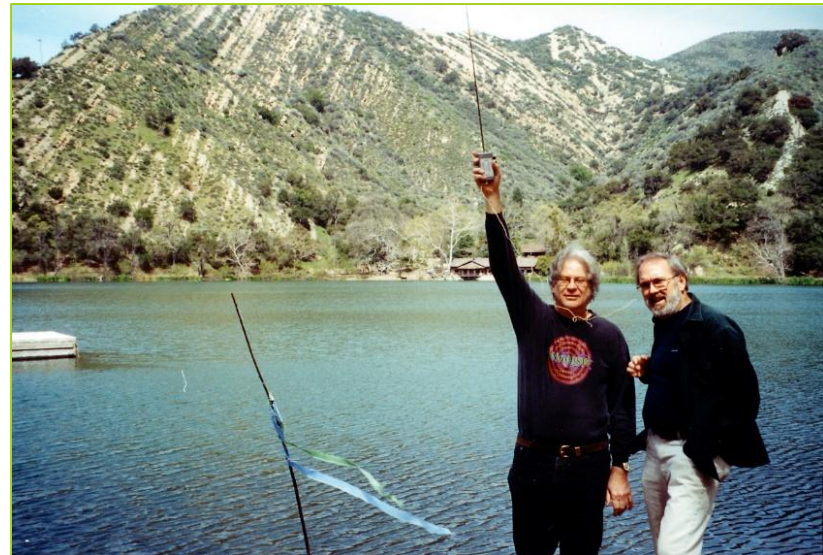
The INSPIRE Project

Inspiring our next generation of
scientists and explorers for 27 years

Dr. Phillip Webb
INSPIRE Board President

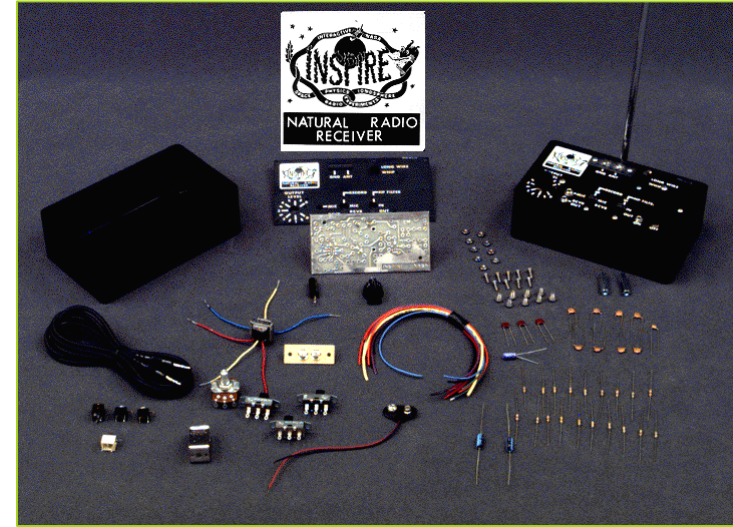
About INSPIRE (Interactive NASA Space Physics Ionosphere Radio Experiments)

- The INSPIRE Project is a Non-Profit Educational Scientific Corporation
- Founded in 1989 by NASA Space Scientist & Educator Dr. William (Bill) Taylor and High School Physics Teacher Bill Pine
- **Mission:** Excite and Engage Students to Learn through Interactive, Hands-On Space Science Experiments
- Volunteer Board of Directors, Advisors and Ambassadors



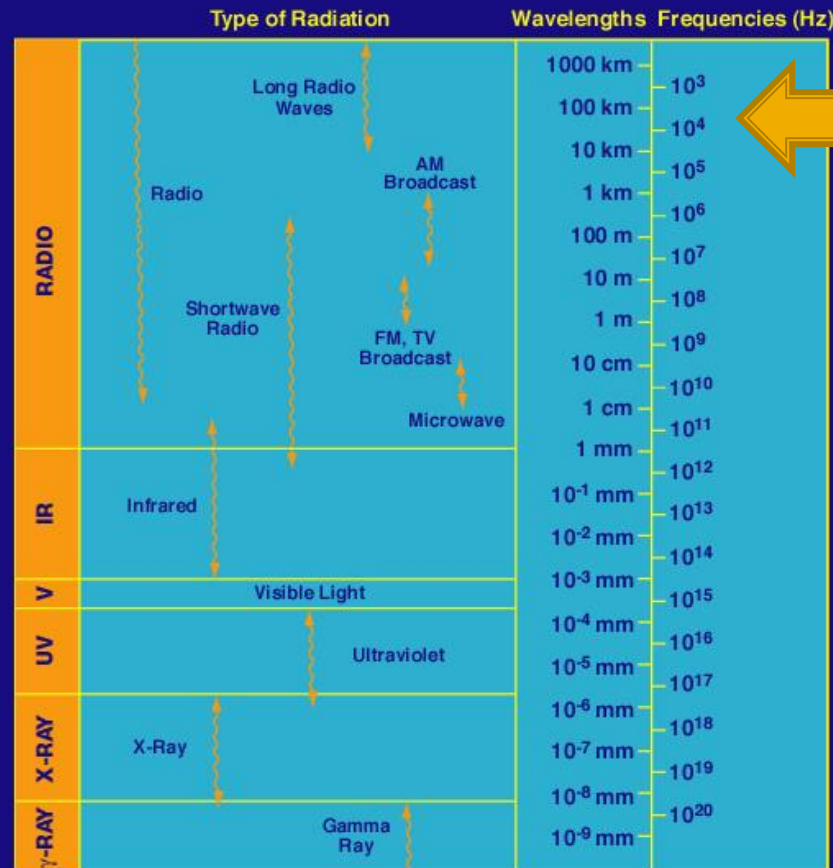
INSPIRE VLF Radio Receiver Kit

- **Underlying Goal:** Educate Students about the Sounds of Space through Hands-On Experience
- Radio Receiver Kits Expose Students of All Ages to Electronics, Atmospheric & Space Physics
- Assembled Receiver Kits Used to Listen & Record VLF Radio Waves



Very Low Frequency (VLF)

Radio Frequencies in the Range of 3 kHz to 30 kHz



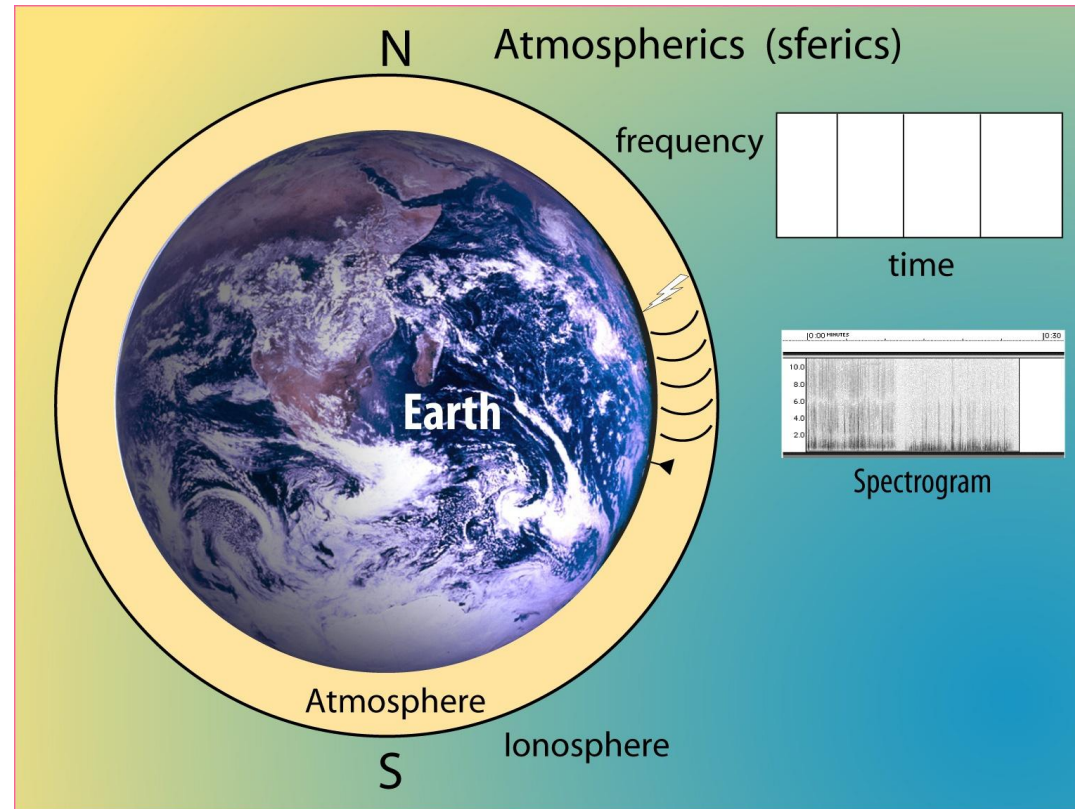
Very Low Frequency (VLF)

- Most Naturally Occurring VLF Waves Come from Lightning
- The Human Ear Can Generally Hear Sounds with Frequencies Between 20 Hz and 20 kHz
- If You Convert VLF Waves to Audio Sound Waves, Then You Can Hear Them



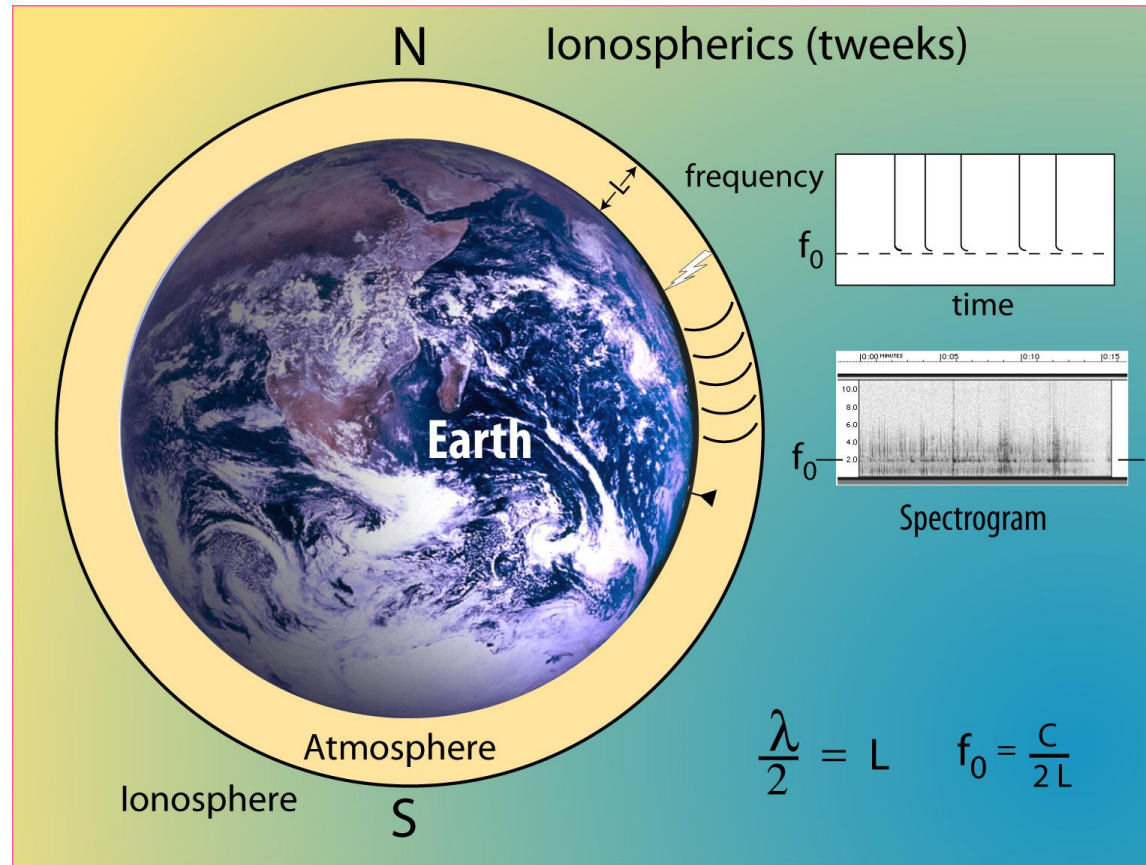
Sferics

- Short for "Atmospherics"
- Caused by Lightning within Several Thousand Kilometers
- VLF Wave "Trapped" Between Surface of Earth and the Ionosphere – Acts as a Wave Guide



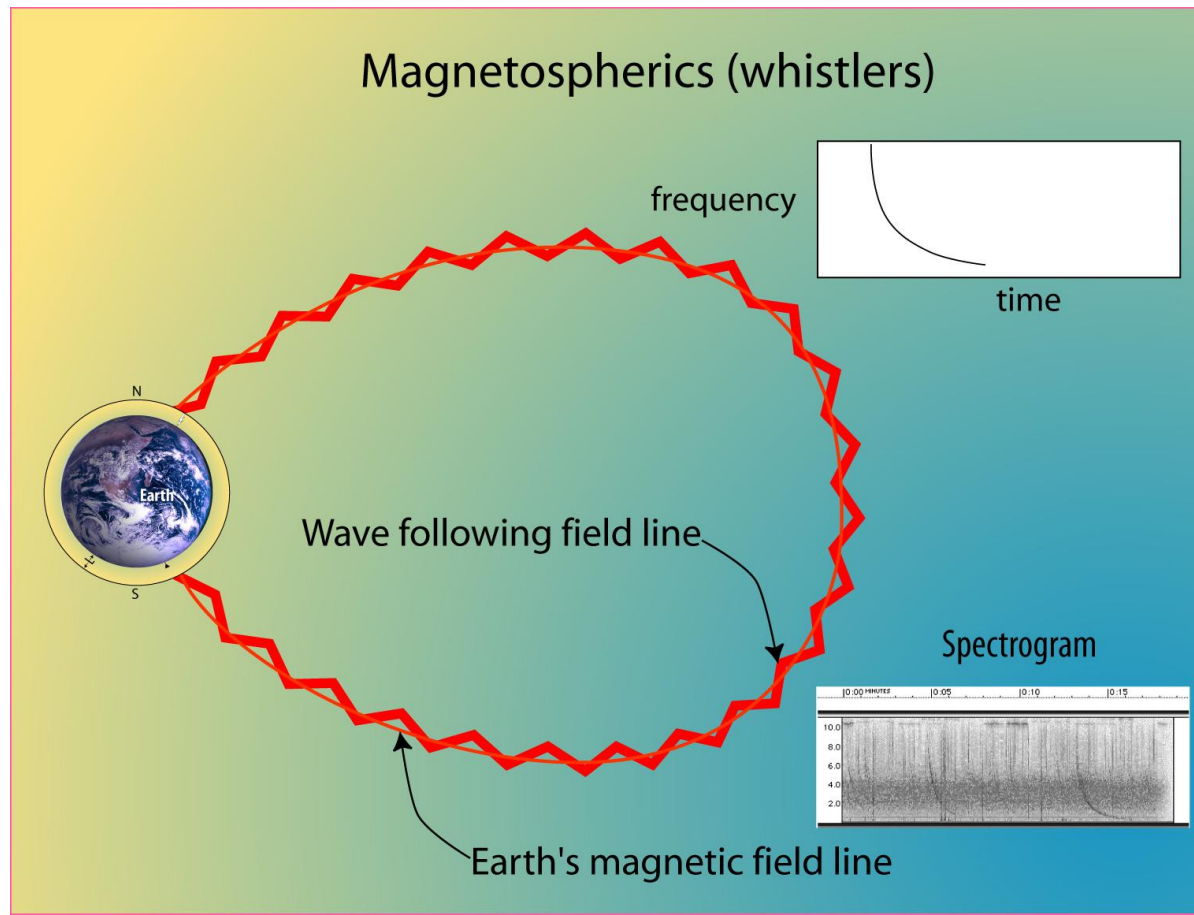
Tweeks

- Created when the VLF Wave Travels Greater Than a Few Thousand Kilometers
- Can Travel Halfway Around the Earth

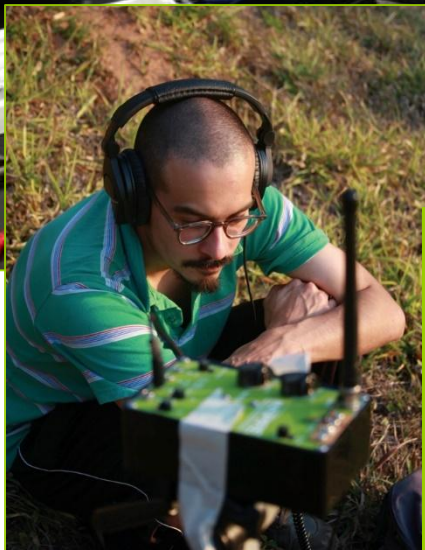
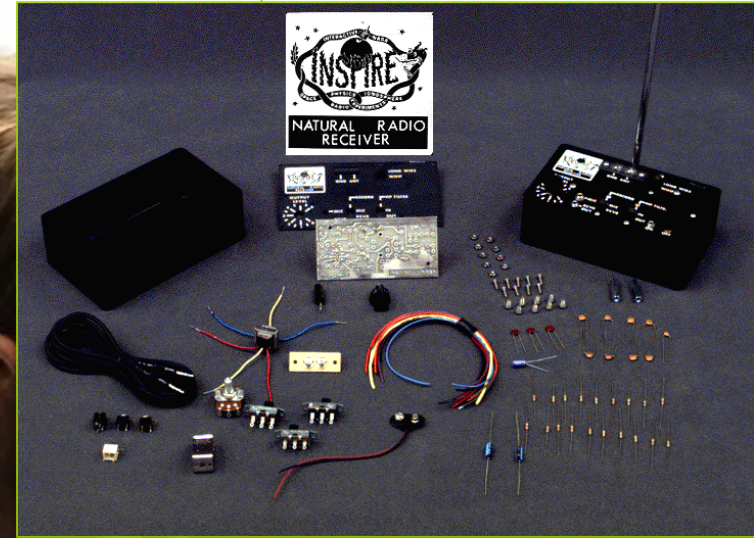


Whistlers

Under the Right Conditions the VLF Wave Travels Out from the Earth and Returns by Traveling Along a Magnetic Field Line



INSPIRE VLF Receiver Kits



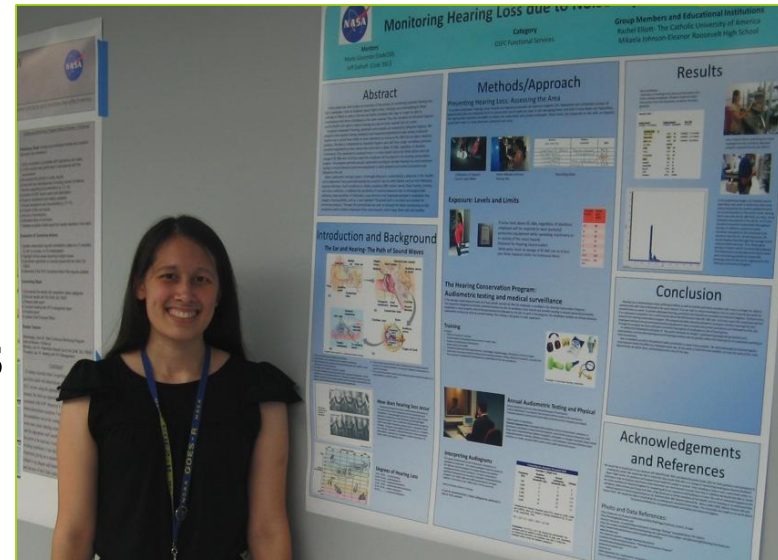
**3,200+ INSPIRE VLF
Kits Worldwide**



INSPIRE STEM Programs

In 2006, INSPIRE Began to Expand its STEM Programs – Current Programs Include:

- William Taylor Memorial Scholarships
- NASA Goddard SFC Internships
- Space Academy for Educators
- Space Academy for Students
- STEM Workshops
- The INSPIRE Journal & Website



Dr. William W.L. “Bill” Taylor Memorial Scholarship

- Established in 2006 in Honor of INSPIRE Co-Founder Bill Taylor
- Annual College/University STEM Scholarship Competition
- Open to DC Undergraduate & Graduate Students
- \$4,000 Scholarship Awards
- 11 Scholarships Awarded to Date



Dr. William W.L. “Bill” Taylor Memorial Scholarship Hannah Clark – Howard University

- Junior Majoring in Computer Science at Howard
- Recipient of Summer Google Engineering Practicum
- Founder of SwypeShark App

This scholarship not only assisted in financing my undergraduate degree in computer science, it enabled me to excel academically and give securing a valuable summer experience presidency!



January 11, 2016

Howard University Students Launch Startup to Offer Affordable Access To Campus Meals

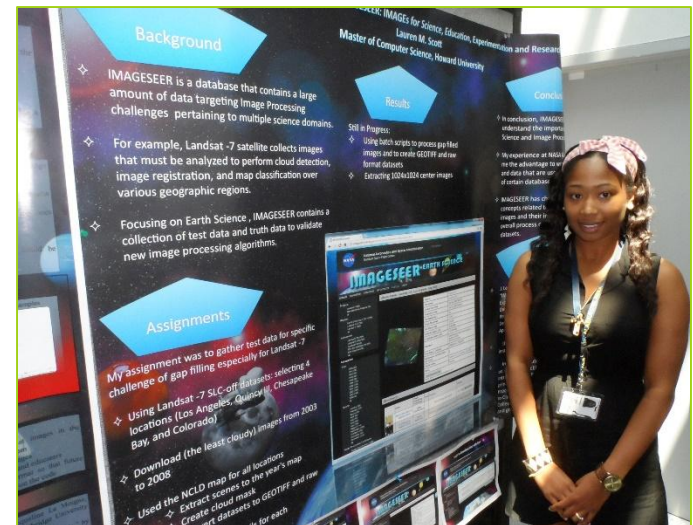
Written by [Hadiyah Mujhid](#) Posted in [HBCUMade, Startups](#) Comments [1](#)



Alston and Hannah Clark (brother and sister) are a true Bison Family. Both of their parents went to and met at Howard University, where Alston and Hannah are currently attending. Growing up homeschooled in St. Paul Minnesota and Maryland, the two tech entrepreneurs developed a

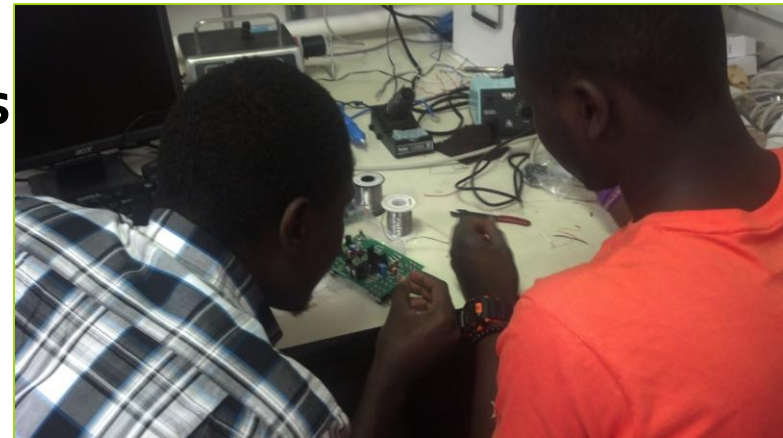
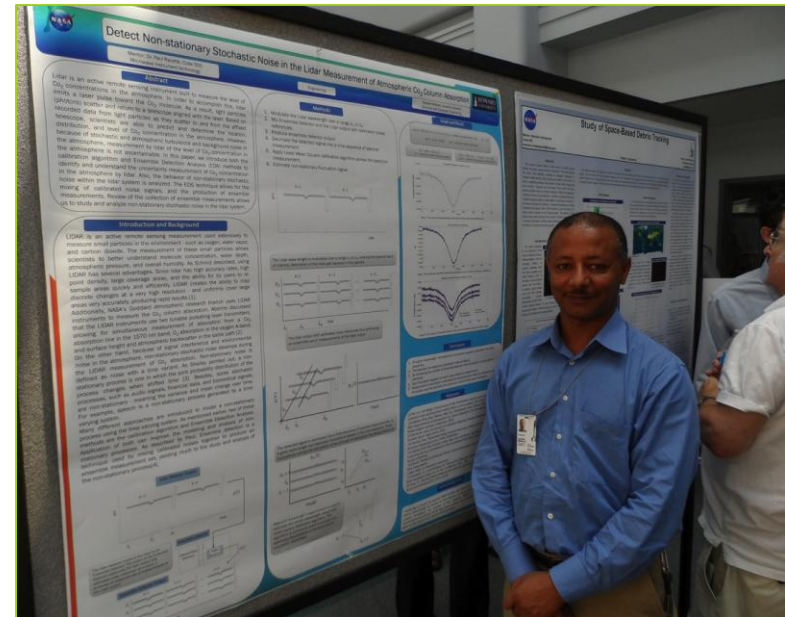
NASA Goddard Space Flight Center Internship Award Program

- Established in 2008
- Paid Summer Internship Awards
- Students Paired with NASA Mentor
- Present Research to Scientific Community via Poster Presentation
- Open to DC Undergraduate & Graduate Students
- \$6,000 Internship Awards
- 19 Internships Awarded to Date



NASA Goddard Space Flight Center Intern Derrsie Mebratu – Howard University

- Electrical Engineering PhD Student and Goddard Intern
- Serves as an INSPIRE Ambassador and Assisted in Securing Partnership with Howard University
- **The Result:** INSPIRE Sponsored a 2 Week STEM Workshop in July 2015
- DC High School Students Assembled VLF Kits and Conducted Observations
- Included Weekly Presentations by STEM Professionals on Career Paths



Space Academy for Educators

- Established in 2009
- 5-Day STEM Workshop for Middle & High School Teachers at the U.S. Space & Rocket Center in Huntsville, Alabama
- 45-Hour Educational Program Equips Teachers with Knowledge, Hands-On Activities & Curriculum Materials to Excite, Engage and Attract Students to STEM



Space Academy for Educators

- Program Curriculum includes NASA Content & Correlated to the National Science Education Standards
- Open to DC Middle & High School Educators and Administrators
- Full Scholarship Awards including Tuition & Travel
- 25 Scholarships Awarded to Date



Space Academy for Educators **INSPIRE Alumni Successes**

In 2014-15 Annual Survey, 100% of Recipients are Utilizing Space Academy Curriculum in their Classroom Impacting 2,000 Students in 29 DC area Schools

Florentia Spires

(District of Columbia Public Schools)

- Received a Prestigious National Science Foundation Albert Einstein Fellow for 2013-14 School Year
- Appointed Master Educator by District of Columbia Public Schools where she Coaches Novice STEM Teachers Districtwide



Space Academy for Educators INSPIRE Alumni Successes

Britni Whitty

(Rose L. Hardy Middle School)

- Incorporated Kerbal Space Program in Curriculum
- Students Participated in Team America Rocketry Challenge – National Competition with 700 Schools (predominately high schools) – Only 1 of 2 DC Teams to Participate



Space Academy for Educators INSPIRE Alumni Successes

Thurman Jones

(Patriots Technology Training Center)

- In 2010, Upon Returning from Space Academy Mr. Jones and INSPIRE's Late Executive Director, Kathleen Franzen, Developed an Annual Solar Competition for Middle School Students
- 5th Annual Solar Competition *Mission to Mars* was held at NASA Visitors Center in April 2015 (8 middle schools participated)
- Winning Team & Educator Accompanied INSPIRE to Space Academy in July 2015



Space Academy for Students

- Founded in 2010 as a Direct Result of Space Academy for Educators (funded by private donors & partners)
- 6-Day Educational Hands-On Training STEM Program to Help Create Our Next Generation of Space Scientists and Explorers
- Open to DC Metro Area Middle & High School Students
- 56 Scholarships Awarded to Date



The INSPIRE Journal

- Annual Scientific Publication
- STEM Program Information
- Scientific Submissions
- STEM Scholarship & Intern Recipient Articles
- VLF Observations & Research
- Emailed to 1200+ Recipients
- 300+ Hard Copy Requests
- Posted/Archived Online



Website - TheINSPIREProject.org

- User-Friendly Site
- STEM Program Information & Online Applications, INSPIRE Journal Archives, VLF Information, Recordings & Kit Order Form
- 50,000+ Visitors during past 6 Months
- 1300+ Email Sign-Ups
- 250+ STEM Program Applications Submitted

INSPIRE

SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS

EXPLORING VERY LOW FREQUENCY NATURAL RADIO

INSPIRE
INTERACTIVE NASA SPACE PHYSICS
IONOSPHERE RADIO EXPERIMENTS

CLICK HERE
ORDER
A VLF-3 RADIO
RECEIVER KIT
TODAY!

Space News Feed

[NASA Remembers Its Fallen Heroes, 30th Anniversary of Challenger Accident](#)

NASA will pay will tribute to the crews of Apollo 1 and space shuttles Challenger and Columbia, as well as other NASA colleagues, during the agency's Day of Remembrance on Thursday, Jan. 28, the 30th anniversary of the Challenger accident. NASA's Day of Remembrance honors members of the NASA family who lost their lives while furthering the cause of

[Media Invited to See NASA's Orion Crew Module for its Journey to Mars](#)

NASA's Orion crew module will be available to media at two NASA locations Jan. 26th and in early February, as engineers continue to prepare the spacecraft to send astronauts deeper into space than ever before, including to an asteroid placed in lunar orbit and on the journey to Mars.

RSS Widget for Website

LINKS

[NASA Goddard Space Flight Center](#)

[US Space & Rocket Center](#)

[Washington Space Business Roundtable Forum](#)

[Society of Amateur Radio Astronomers](#)

[Radio Jove](#)

[VLF Spectra from World Wide Lighting Location Network](#)

HOME

ABOUT

INSPIRE VLF-3 RADIO RECEIVER KIT

NATURAL VLF RADIO

UNIVERSITY SCHOLARSHIPS

NASA GODDARD INTERNSHIPS

SPACE ACADEMY SCHOLARSHIPS

INSPIRE JOURNAL

RESEARCH & SCIENTIFIC PUBLICATIONS

EMAIL SIGN-UP

NEWS

FAQ

CONTACT

The INSPIRE Project, Inc.
107 S West Street
PMB #425
Alexandria, VA 22314-2824
info@TheINSPIREProject.org


Become a fan today!

WELCOME TO THE INSPIRE PROJECT

INSPIRE VLF-3 RADIO RECEIVERS

Since 1989, INSPIRE has provided radio receiver kits to over 2,800 students and other groups within the United States and internationally to make field observations of VLF signals. The INSPIRE VLF-3 receiver is designed to receive radio waves in the 0-10 kHz frequency range, which is audible to the human ear when converted sound waves by either speakers or headphones.

To order an INSPIRE VLF-3 Radio Receiver, [CLICK HERE](#)

THE INSPIRE JOURNAL SPRING/SUMMER 2015

The INSPIRE Journal is a publication of The INSPIRE Project. To read the Spring/Summer 2015 issue [Click Here](#)

College/University Students:

DR. WILLIAM TAYLOR MEMORIAL SCHOLARSHIP

\$4,000 Scholarships for College/University STEM Students

In honor of INSPIRE's founder, Dr. Bill Taylor, INSPIRE with its partners has established this annual scholarship program. Scientifically oriented undergraduate and graduate students and high school seniors who are currently or will be attending a DC college or university are encouraged to apply. [CLICK HERE](#)

PAID NASA GODDARD INTERNSHIP PROGRAM

\$6,000 Internship Award at NASA Goddard Space Flight Center

Students are paired with a mentor at the NASA Goddard Space Flight Center to design and complete a project focused on science and engineering research. The period of award is either 15-20 hours per week for one semester or full-time during the summer. [CLICK HERE](#)





Thank You for Your Continued Support

The INSPIRE Project