

# Delaware AeroSpace Education Foundation 2021-2022 Annual Report







The vision for DASEF's Galaxy Garden on ½ acre of land on our site began in 2015 and was dedicated on August 3, 2021.

Six different plant species growing in the spirals our garden represent different aspects and portions of the Milky Way. DASEF's Garden is third of its kind in the world. Come to our campus and walk the spirals of the Milky Way!

It is a botanical representation of the Milky Way Galaxy. Every plant, leaf, and speck mirrors a portion of the Milky Way. Jon Lomberg, astronomical artist and founder of the Galaxy Garden idea, explains it this way: "It's taking the Milky Way Galaxy and scaling it down for people to understand." The spiral garden was created to scale with plants representing stars, planets, asteroids, and anything else found in the galaxy. DASEF's Garden is the third of its kind in the world.



### **ABOUT DASEF**



Founded in 1989, the DASEF (Delaware Aerospace Education Foundation), an independent non-profit educational organization having 501(c)(3) status, functions to raise the visibility and value of K-12 STEM (Science, Technology, Engineering and Mathematics) education to meet intellectual and workplace needs of the future. DASEF implements successful programs using proven instructional strategies to motivate, engage, educate, and inspire people from diverse backgrounds and communities in Delaware.

The DASEF vision is driven by the belief that "Wisdom Begins with Wonder." Capitalizing on natural curiosity through activities that include a problem solving component enriches the learning process for participants.

DASEF has established itself as an innovative and progressive organization with the vision and resources required to link contemporary Earth and space themes with traditional school subjects to increase interest in science and technology.

### 2021-2022 ANNUAL REPORT

Dear Friends of DASEF,

In 2021 our income was still substantially diminished. However, your generous donations enabled us to sustain DASEF as we expanded and implemented safe and enriching school and community programs. We worked hard to adapt and offer innovative activities to enhance Science, Technology, Engineering and Math (STEM) Education in K- 12 classrooms and for the public.

With a heavy heart, we were not able to run the 2021 Academy at the University. To move forward we designed and offered an outdoor Academy; Earth, Nature, and Space (ENS) for 2 different levels at the Outpost. We hired buses to bring the cadets to us. The numbers were low: 26 cadets the first week and 17 the second week, but we were back. Outdoor events, the Academies, and programs were generously supplemented by individuals, our corporate sponsors, and NASA Space Grant. We held our second STEAM Symposium for 5th -12th graders in the fall. Schools slowly began to schedule field trips. All of us at DASEF began to see the light at the end of the tunnel. We began moving forward with our programs and events in 2022.

After a two-year hiatus from the Academy at UD, we were excited and thankful to be back. The staff was incredibly motivated and worked hard to provide rewarding educational experiences. We graduated 132 cadets from Delaware and the surrounding region with innovative applied learning challenges to increase their knowledge and competency in STEM and Life Skills. Since 1990, over 8,230 cadets have graduated from our quality programs. Additionally, we have reached over 608,300 children, teachers, and the public through other DASEF programs, field trips at the Outpost and outreach activities.

Field Trip program curricula address Delaware's STEM Standards. Information and experiences are provided to give students, teachers, and the public opportunities for increased understanding of specific science topics and Standards through participation in science experiments and design challenges. Our Accredited Staff, Board and Council are creating programs and events that will sustain DASEF for years to come!



2022 Academy Staff



Cathy Cathell, Program Coordinator, NASA DE Space Grant/NASA EPSCOR, Dr. Stephanie Wright, K-12 Outreach Program Director, Delaware Space Grant, Dr. William H. Matthaeus Director, Delaware Space Grant Consortium

With continued funding from the State of Delaware Legislature, work continues at the Innovation Technology Exploration Center (ITEC), Our 40-acre site is centrally located and easily accessible to ALL in Delaware and the MidAtlantic region. We strive to provide a vibrant, safe, and positive learning environment conducive to success. Our goal of completing and opening the first floor of our Center in late 2023 is on schedule. ITEC will expand DASEF's imprint and impact implementing a community model for formal and informal education as a focal point for school programming, professional development, and public outreach. In addition to engendering STEM experiences, we value the importance of social infrastructure. DASEF is aspiring to assist various communities develop "a sense of belonging" by providing schools, the public, government and funders opportunities that provide a positive, all-inclusive community-centered approach. DASEF endeavors to partner with our state to build a more sustainable and equitable future for all of our citizens.

Financial management of DASEF embraces disciplined, conservative financial stewardship. All construction has been funded without debt and completed on budget. Solicitation of grants and other efforts seeking capital funding for construction continue and remain necessary to enable continued progress toward the completion of ITEC.

DASEF is appreciative of the collaboration and program support of many partners that include, Delaware's Institutions of Higher Education, Delaware NASA Space Grant, DuPont, Agilent, IBM, 3M, SSS Clutch, Northrup Grumman, Delaware Electric Cooperative, Chesapeake Utilities, State of Delaware Libraries, Wilmington Flower Market, AAUW and may other non-profit and corporate sponsors. Through the efforts of our Board members, Advisory Councils, our staff and many volunteers and corporate sponsors, 2023 is off to a great start! We look forward to expanding our programs and ask for your continued support as we return to serving the region in 2023. *At DASEF, we ALL believe Wisdom Begins with Wonder!* 

We are very proud to be celebrating the start of our 34th year of serving children and their families!!

Very sincerely,

Stephanie M. G. Wright, Ed. D. • President & CEO

Charlie Michels

Charlie T. Michels • Chairman, Board of Directors

# N S D I L I D ducating

Following are comprehensive financial statements excerpted from DASEF's Fiscal Years 2021 and 2022 (January 1 - December 31) audit performed by the accounting firm of BBD, LLP, Certified Public Accountants, Philadelphia, Pennsylvania. Complete audited statements are available from DASEF upon request.

Balance Sheets DECEMBER 31, 2021 and 2022			
<u>Assets</u>	<u>2021</u>	<u>2022</u>	
Cash and Restricted Cash	\$2,311,976	\$2,384,606	
Investments	103,628	85,552	
Property and Equipment (Net)	11,871,225	13,879,469	
Total Assets	\$14,286,829	\$16,349,627	
<b>Liabilities and Net Assets</b>			
Accounts Payable	\$95,584	\$187,061	
Net Assets	14,191,245	16,162,566	
Total Liabilities and Net Assets	\$14,286,829	\$16,349,627	



Since 1994, DASEF has awarded \$280,157 in Aerospace Academy Scholarships to 1,451 cadets!

# STATEMENT OF REVENUE/EXPENSES - For the Years Ending DECEMBER 31, 2021 and 2022

Revenues	<u> 2021</u>	<u>2022</u>
Contributions and Grants	\$2,274,257	\$2,252,016
Tuition and Programs	13,847	80,789
Other Revenue	<u>42,998</u>	(9,705)
Total Revenues	\$2,349,102	\$2,323,100
<u>Expenses</u>		
Program Expenses	\$245,932	\$317,705
General and Administrative Expenses	31,175	33,074
Fundraising	<u>800</u>	<u>1,000</u>
Total Expenses	<u>\$277,907</u>	<u>\$351,779</u>
Increase in Net Assets	\$2,071,195	\$1,971,321

### **MISSION:**

To inspire and educate the people of the Delaware Valley in learning about Earth's environment, Earth and space science, technology, engineering and mathematics through the use of academies, presentations, symposiums, professional development, events, and activities and the resources of DASEF's Environmental Outpost.

### **CORE VALUES:**

- Integrity and compassion
- Responsible decision making
- Environmental stewardship
- Innovation, exploration, and discovery

### **VISION:**

To create an exceptional learning environment that inspires children and their families with a sense of appreciation for Earth and its place in the universe.

### **DASEF: OUR JOURNEY AT A GLANCE**

### DASEF: Explore, Discover, and Learn.....

Programs reach public, parochial, private and home schools, youth groups, Girls and Boys Club, teachers, libraries, 4 H, pre-school, scouts and regional families. Approximately 22% of the school children come from "Low Income families" (U.S. DOE-defined). DASEF's educational participants encompass the full range of socioeconomic backgrounds.

DASEF strives to be all inclusive, serving all children at risk and those with special needs or disabilities are served. It is our goal to measurably contribute to enriching children, teachers and the public with educational interactive STEM experiences. We value and respect all children and their families and teachers and strive to instill a love of learning in each of them.

We have served over 621,000 students, teachers and families in the Delaware Region. With the pandemic behind us, DASEF is moving forward!

### DASEF EXPERIENCE



DASEF's Keynote Speaker, Elaine Stewart, with Dr. Wright after her 2021 Webb Telescope Briefing at our 2nd STEAM Symposium sponsored by Delaware Space Grant and DuPont.



Symposium attendees use catapults to learn about trajectory.



Children from La Fiesta Early Development Center learn about simple machines.



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### **ACKNOWLEDGEMENTS**

### SPECIAL THANKS ARE EXTENDED TO THE FOLLOWING:

**DASEF Honorary Board and Board of Directors** 

**DASEF Advisory Council** 

The Honorable Joseph R. Biden

The Honorable Thomas R. Carper

The Honorable Christopher A. Coons

The Honorable John Carney

Kent County Commissioners and Levy Court

3M

Adams/Bloom Memorial Scholarship Fund

Advantech

Agilent Technologies

American Association of University Women, Newark

American Association of University Women, Western Sussex

American Association of University Women, Wilmington

**Bancroft Construction Company** 

Bank of America

BBD, LLP

Blue Earl Brewing Company

Boeing Company, Boeing Advanced Rotorcraft Systems

Bruce L. Hudson, Attorney at Law

Center for Environmental Monitoring and Analysis (CEMA)

Central Economic Development Council

Charles Parks Studios

Charter Oak Credit Union

Chesapeake Utilities

Chichester Foundation/Lydia Foundation

Christiana Care Life Net

Civil Air Patrol

Delaware Division of Libraries

Delaware Electric Cooperative of Greenwood

Delaware Grant-in-Aid

**Delaware NASA Space Grant Consortium** 

Delaware Solid Waste Authority

Delaware State Police

Delmarva Power

Delaware State University – CAOSS Program

Division of Delaware Parks and Recreation

**DuPont Company** 

Goddard Space Flight Center

**Greater Dover Foundation** 

**IBM** 

ILC Dover, Inc.

Jean and Bruce Kraeuter

Joseph T. Farina, AIA

Kent County Chamber of Commerce

Kent County Tourism

Master Interiors

Mr. and Mrs. Gerret Van S. Copeland

National Aeronautics and Space Administration

NASA Summer of Innovation Mini-Grant Program

New Castle Insurance, LTD

Northrop Grumman

Painted Stave Distillery

**Proctor & Gamble Dover Wipes Company** 

Elmer and Betsy Read

Rolling Revolution Food Truck Group

Ronald McDonald House Charities of the

Philadelphia Region, Inc.

**RPJ Waste Services** 

Seaford Lions Club

Sigma Data Systems, Inc.

Spitz, Inc.

SSS Clutch

State of Delaware Bond Committee

State of Delaware General Assembly

**Sutton Bus Company** 

The Christmas Shop Foundation

Town of Smyrna

University of Delaware

- Composite Center
- Engineering Department
- Physics Department
- Graphics

U.S. Air Force, Dover AFB

**USDA** Rural Development

Wilmington Flower Market, Inc.

Stephanie and Brian Wright

Yeager Wright Brothers' Scholarship Fund

# .....AND ALL THE MANY OTHER VOLUNTEERS WHO MADE ALL OF THIS POSSIBLE.





DASEF was invited to participate in the 2022 Geographic Information Day held at the DAFB! The giant Earth Balloon was very well received by all!



Board Chair, Charlie Michels interacts with guests at the annual 2022 Delaware Electric Cooperative Board meeting, a key sponsor of DASEF's events and programs.

### DASEF'S YEARS IN REVIEW: PEOPLE MAKE THE DIFFERENCE



2022 Day Academy cadets at the University of Delaware.



Scout's Space Exploration Badge Day led by instructor Chuck Halfen.



Students from Wilmington Manor School learn about and construct bridges at the Outpost.



Manatees at the Dover Library - part of DASEF's Summer STEM program partnership with the State of Delaware Libraries.



Instructor Mary Koster explains a part of the operational Delaware Environmental Observing System (DEOS) Weather System on our site.



Two cadets who have stayed friends through the Academy - Destination Space.



Four years later - Destination Moon.



Forest Oak students study Motion and Design.



Civil Air Patrol Space Exploration at the Outpost.



## www.DASEF.org

### **DASEF**

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DASEF strives to improve the quality education, the environment, and of life through its advocacy of

strengthening the workforce.



The Outpost in Autumn.



ITEC is Coming in 2023!!!



Monarchs at the Outpost.