

The Next Stage

The Huntsville Division Alumni Association
P.O. Box 4185
Huntsville, AL 35815-4185

Place
Stamp
Here

REMINDER: \$12 DUES FOR 2021 WERE DUE 1/1/21.

*IF YOU HAVEN'T ALREADY SUBMITTED, PLEASE
CONSIDER DOING SO SOON. THANKS!*



*May the joy and
peace of the
season be with
you and yours
throughout the
coming year!*

*Embrace the joy
of giving...and
you will receive
far more than
you can imagine!*

VOLUME 26, ISSUE 4

THE NEXT STAGE

NOVEMBER 13, 2021

The Next Stage is the quarterly newsletter publication of the Huntsville Division Alumni Association, Inc. Distribution: approximately 90. Editor: Patti Wilson. Its address is POB 4185; Huntsville, AL; 35815-4185.

The 2021 HDAA Board consists of : President/Gerald Roberts, VP/Tom Bryant, Secretary/Cecil Stokes, Treasurer/ Membership/Charlie Thomas. Directors: (21) John DeHaye, (21) Patti Wilson, (22) Bill Barnes; (22) Jim Gasaway, (22) Paul McFall,; (23) Ron Clements, (23) Glenn Webb.

Ex-officio members of the Board are: Historian (position vacant), and Cecil Stokes/WebMaster.

Contact Cecil for details about the HDAA website and how to view more photos in color!

*Don't forget to
join us at
Magnolia
Trace 12/4/21,
at 11 a.m.!*



In Fond Memory...

We join the families in mourning the loss of family, friends and prior coworkers:

Bessie June Certain: Who worked at the Division in 1960, Section 421.

Kenneth Gordon Cherry: Brother of Nita Boyd, who worked in Engineering.

Shelby Jean Taylor Guinn: Wife of Dr. Gerald "Jerry" Guinn, who worked in Engineering in the late 1950s.

Burl Slaten: At the Division 1966 until 1996, when he worked in B-7741.

Charles Thomas Vencill: Who worked in the Igniter Lab from 1988-1991.

Dr. Richard "Woody" Waesche: Never a member of the Thiokol team, Woody was an industry leader and sometime competitor who spent a lot of time in Huntsville, interfacing with Many at Thiokol.

Ann White: Who worked in Section 332 at the Division in the 1960s.

They will be sorely missed by us all, since they truly touched our lives.

Gratitude changes the pangs of memory into a tranquil joy.
-Dietrich Bonhoeffer

*There are two kinds of Gratitude: The sudden kind we feel for what we take;
The larger kind we feel for what we give.*
-Edwin Arlington Robinson

*When old people speak it is not because of the sweetness of words in our
mouths; it is because we see something which you do not see.*
-Chinua Achebe

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Newsletter of The Huntsville Division Alumni Association

NOVEMBER 13, 2021

Next Board Mtg:

(2nd Thu each quarter)
Jan 13, Apr 14, Jul
14, Oct 13, 2022.

2:30 pm Faith
Presbyterian Church,
SE corner of
Whitesburg/Airport,
5003 Whitesburg Dr.

Dates to Remember:

2021

**Sat. 12/4: Christmas
Party...Magnolia
Trace Ballroom.**
Social Hr: 11 a.m.
Lunch: ~12 p.m.

2022

Spring Breakfast: TBD
Summer Picnic: 6/4
Fall Lunch: TBD
Christmas Party: 12/3

Details of events
provided closer to
date of event!

*Will be great to see
everyone... so,
Please join us!*

Monthly:

It's been far too long,
so please let us know
if there is interest in
returning to these
gatherings!

1st Wed: Ladies
Luncheon @ Gibson's
S Mem Pkwy. **Call
Patti/534-9702 if
interested!**

2nd Tue: Breakfast
gathering with **Bill
Russell/256-650-
5400.**

3rd Wed: Lunch @
Logan's/Balmoral Dr.
**Email Jim Gasaway
@ djgas@att.net if
interested!**

Together Again for a REAL, In-Person Christmas Party!!!

Last year's virtual Zoom Christmas party was fun, especially with all our HDAA "home-grown" entertainment. Think all who attended had a wonderful time. And, it was wonderful seeing faces we hadn't seen in so long!

We are getting together **in-person** at **Magnolia Trace** in their magnificent ballroom on **Saturday, December 4, 2021! Social hour will be at 11:00 a.m., with lunch being served ~12:00 p.m.** Magnolia Trace's new chef, Luke Joseph, is happy to provide a delicious fare of Garden Salad with assorted dressings and Champagne Vinaigrette Ranch, Ham and Roasted Turkey with Gravy and Cranberry Sauce, Cornbread Dressing, Mashed Potatoes, Green Bean Casserole, Pecan Pie, and Assorted Breads with Butter. Beverages: Water, Iced Tea, Coffee with condiments. Sounds Scrumptious!

Your Committee, Cecil Stokes, Glenn Webb, and Jan Kranert negotiated fiercely to keep the cost down to **\$15 per person**, partially subsidized with HDAA funds. Thanks to you all for a job well done!

Paid Reservations must be in by Monday, November 29, 2021, so Chef Joseph can make ample preparations for another successful Christmas Party.

Mail checks to HDAA, P.O. Box 4185, Huntsville, AL 35815.

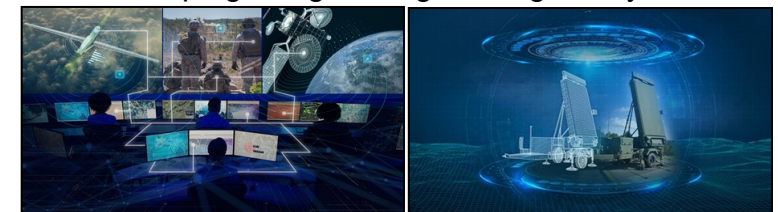
And, if you can't make it for some reason, pass your paid reservations along to another member who can then attend!

Join us on December 4. Looking forward to seeing you!



Northrop Grumman's Creating Force Multipliers Developing a Digital Engineering Ecosystem

*Digital
Engineering
Ecosystem*



*Digital
Twin Imaging*

When data and digital tools are disconnected and scattered, engineers have to spend time gathering information and constructing a digital environment before they can start a new project or make changes to an existing program. As digital transformation has spread across all industries, including aerospace and defense, technology has transformed engineering from pencil and paper to the digital environment. This change has opened new opportunities, but it has also created new challenges.

As a solution to some common challenges, Dr. Orlowski, Director of Digital Engineering, and his colleagues designed, developed and launched a digital ecosystem that integrates the predominate data and tools that engineers use across the entire product life cycle of a

(Source: <https://www.northropgrumman.com/what-we-do/digital-transformation/creating-force-multipliers>) Continued Page 3

THIOKOL HISTORY MARKER

As you are already aware, the past several years have resulted in a beautiful memorial of Thiokol/Huntsville Division, thanks to your HDAA Board (primarily Glenn Webb, Cecil Stokes, and Ron Clements, and donations from many individuals). The Marker is shown below at the dedication ceremony in June of this year.



L-R: Mayor Tommy Battle, Patty and Glenn Webb.

Along a portion of the 12-foot wide multiuse path is the Thiokol History Marker. Glenn Webb has been working with the city to enable naming the Marker Site with a permanent sign which says **Thiokol Plaza** along the path close to the marker site. *Coming soon!*

If you haven't had an opportunity to see it, please take the time on a nice day. You might be able to park close to the site so there won't be a long walk (~1/2 mile from nearby parking lot). But, if it's a nice day, the walk would do us All a world of good! So, take a short hike and then relax a while at the Thiokol Plaza, relive a few fond memories, and remember to mentally thank all the hard work that went into seeing this historic marker coming to fruition. *Thanks for all your hard work and dedication during this project Cecil, Glenn, and all who contributed in so many ways! More color photos and a complete documentation of the dedication ceremony may be seen on the HDAA Facebook page.*

ADVANCE HEALTHCARE DIRECTIVE

(Excerpt from Mayo Clinic Health Letter, August 2021)

Everyone, no matter the age or current health status is encouraged to write out an advance healthcare directive (AHD), which should be updated as your status changes.

The AHD can name someone to make medical decisions for you if you're unable to do so (a power of attorney for health care), and specify treatments you do/do not want such as tube feeding, mechanical ventilation, etc. (a living will). This keeps loved ones informed of your health care wishes as your status changes during your life.

The AHD is a gift to yourself, ensuring you will be treated in the manner You want, as well as a gift to your loved ones who will be able to act with greater confidence if they need to make life/death decisions for you.

State-specific forms can be found at www.aarp.org/caregiving/financial-legal/free-printable-advance-directives, and the National Hospice & Palliative Care Organization at www.nhpco.org/advance-directive. Huntsville Hospital also has current versions of the AHD in the Admissions area on the ground floor, free!

A copy of the AHD should be given to your doctors, your family, your hospital, and in your car (easy/quick access).

My super power is holding onto junk for years and throwing it away a week before I need it.

HAPPY THANKSGIVING TO ALL!

Let gratitude be the pillow upon which you kneel to say your nightly prayer. And let faith be the bridge you build to overcome evil and welcome good.

-Maya Angelou

Gratitude is a quality similar to electricity: it must be produced and discharged and used up in order to exist at all.

-William Faulkner

(Thanks to Iva Thomas for her packet of wonderful Cornerstones!)

Friends In The News...

Carroll Bobb has a great-grand niece that has quite an artistic/creative flair, and shared it with her Air Force Veteran Uncle Carroll just in time for Veterans Day 11-11-21. *Great work!*



Amy and Craig Weckwarth keeping a proper social distance on the beach in Fort Myers, FL last year during the Covid lockdown. They're being protected by fierce Ella! *Still living the good life! And, looking great while doing it...Love it!*

Not only is **Jim Gasaway** cooking up some great recipes with



his "slightly north of the border Tex-Mex peppers," he also seems to have Dave Flanigan's green thumb with his gorgeous daylilies and irises! *Maybe Jim and Julie Garrett need to get a little competitive flower garden photography going! Beautiful work, Jim!*



Taken a "few" years ago, this fabulous photo of **John Dehaye** had to be shown! That magnificent "Ramblin' Wreck from Georgia Tech" looks almost as great as John does! *A*

blast from the past, and he hasn't aged a bit!

TC/HD has a Lot of hidden treasures in its family!

SLATE OF OFFICERS AND BOARD NOMINATED FOR 2022

(Highlighted names only to be voted upon at the annual Christmas Business Meeting.)

President		Tom Bryant	
Vice President		(Open—will discuss at meeting)	
Secretary		Cecil Stokes	
Treasurer/Membership		Charlie Thomas	
Directors: Directors: ('22) Bill Barnes	Directors ('23): Ron Clements	Directors ('24): Jan Kranert	
Paul McFall	Glenn Webb	Gerald Roberts	
Jim Gasaway	Benny Pitsinger	Patti Wilson	
Ex Officio: (Vacant)/Historian		Retiring from Board: John Dehaye. All others agreed to serve again.	
Cecil Stokes/WebMaster		To John and all who agreed to serve again...again...and again...	
		<i>THANKS for serving HDAA with your time and efforts!</i>	

Thanks to the Nominating Committee for doing such a great job! It's difficult to recruit new Board members, since no one wants to commit at this point in our lives, and our group is getting smaller.

We can elect additional directors (Board members) at the annual Christmas meeting; and, anyone else willing to serve should let that be known prior to the 12/4 party. For those who might be interested in serving, Contact a Board Member. Surviving spouses of former HD employees are just as much members as their late spouses were (and, thus, can hold office). We would appreciate your willingness to serve!

If you can't make the Christmas meeting, ballots may be snailmailed: HDAA, P.O. Box 4185, Huntsville, AL 35815-4185; or email a board member so your vote may be tallied at the 12/4 meeting. If coming to the meeting, your ballot may be included with reservations to the annual meeting and will be counted at the annual meeting, usually by a vocal vote of Aye or Nay. *It's hoped you'll plan on joining us for this IN-PERSON Christmas Party!*

NG Creating Force Multipliers, Continued from Page 1

program. "Our solution is a digital engineering Software as a Service platform," says Paul Nelson, Chief Technical Strategist and Tech Fellow.

The integrated digital environment situates Northrop Grumman to meet the digital engineering strategy outlined by the U.S. Department of Defense (DOD), which "promotes the use of digital representations of systems and components and the use of digital artifacts to design and sustain national defense systems."

Northrop Grumman's integrated digital environment creates a connective information highway that allows all these different players to access the information they need to perform their scope of work. There are many different stakeholders involved in aerospace and defense projects: systems engineers, analysts, designers, manufacturers, test engineers, supply chain, and the customer, to name a few. "We bring their information together, so they can work together collaboratively in a shared environment," Nelson explains.

There is a huge advantage to bringing external stakeholders, such as the vendors who are part of the supply chain and the end customer (including different branches of the DOD), into the conversation so that everyone is looking at the same data. When collaboration is coupled with deep information integration the concept is known as an enduring, authoritative source of truth in digital engineering. Importantly, the integrated digital environment also filters information and puts users into different categories to protect different levels of information classification.

In the simplest sense, the integrated digital environment is a framework for organizing and integrating apps and data, similar to how consumer television companies consolidate

streaming services and make it easier to watch your favorite shows from one central platform. But in this case, the ability to rapidly launch and deliver a program can save lives.

"It spans the lifecycle from an inception of an idea all the way through the design, development, test, delivery and sustainment of the product," says Orlowski.

The sustainment of the product is where the digital twin becomes a force multiplier. For example, improving condition based maintenance through predictive and simulated analytics, or tapping into real-time operational data to support live development and test cases during product development.

In the future, having all information about a particular aircraft vehicle detailed in a digital twin will allow engineers to access it from anywhere in the world. For example, this provides the ability to rapidly reconfigure embedded software on an operational asset to respond to a new emerging humanitarian mission for search and rescue as a result of a natural disaster.

The integrated digital environment is being used across all parts of Northrop Grumman — for satellite programs, aircraft, sensor programs, defense missile programs and other initiatives. This unique ecosystem solves a challenge that plagues original equipment manufacturers across many industries that are using advanced technology for product development. Ultimately, it all comes back to the customer's mission.

"This solution is helping us connect our product development capabilities directly with the customer's mission," Orlowski explains, "because as our customers face a continuously changing operational environment, we're supporting them so they are best prepared to adapt, transform and respond with speed ahead of any emerging threats."