President's Message

It’s already November and the beginning of the Holiday Season. It’s a busy time, but my favorite time of year. I enjoy the smell of turkey roasting and all the things that make a holiday feast and add inches to the waistline. I think once, twice, or three times a year - we can live with that.

We have been asked by Arbor Terrace in Peachtree City to participate in their “Festival of Trees.” The trees will be located throughout their community for the residents to enjoy. They have requested that the trees be decorated and in place by December 2, 2019. They want to have 14 trees located throughout the complex and have asked different sponsors to be responsible for one tree. I think this is a “no brainer,” and we should participate in this event. They have been more than gracious by providing a place to meet and preparing a fabulous lunch for us on several occasions. Remember this can count toward your volunteer hours. I know this is a busy time of year for all of us, but your help will be needed.

Remember that the November meeting will be held in the Fayette County Board of Education Board Room which is located in Building A of the Lafayette Education Center (old Fayette County High School.) If you would like to drop off your donations for the Scholarship Auction early, the receptionist at the front desk will accept your donation and place it in a secure location. I hope to see all of you at this meeting. Be ready drive those bids up to increase the money toward our scholarship. These items make great Christmas gifts and the live auction is great fun.

Don’t forget we added the January meeting back to our schedule. This meeting will be at 10:30 AM on January 09, 2020 at the Teacher Resource Center located at 205 Lafayette Avenue, Fayetteville, GA 30214. This is across Tiger Trail from Southern Grounds Amphitheater. The speaker for this meeting is Mr. Emmett Highland who is employed by the Office of Drug Enforcement Administration (DEA.)

(continued next page)
Sunday, November 03, 2019 is Retired Educators Day in Georgia as proclaimed by Governor Brian Kemp. Please encourage your church to recognize the educators in the congregation and put it in the church bulletin. Please bring a copy for our local unit scrapbook. If you can, you might want to go to the school where you retired and ask them to put the information on the school marque. If they do, take a photo for the scrapbook.

I hope you and your families have a Happy and Blessed Thanksgiving.

James R. (Jim) Haymans  
President, FCREA  
770-845-6201 (cell) or 678-305-6856  
uscg.res.ret@gmail.com

**Annual Scholarship Auction**

Reminder: Our annual Scholarship Auction is during our meeting on November 14 at the FCBOE Board Room at the LEC, 205 Lafayette Ave., Fayetteville. The meeting begins at 10:30 and the auction will be at the conclusion of our business meeting at 11:00.

Patty Brown of Red Belly Rooster Auction and Estate Services will be our auctioneer again. We are excited that the staff at LEC will be able to come and participate in the auction, so we hope that you will help us by providing some great baskets and auction items at a variety of prices.

We want to put the baskets on display at least a day before the auction. Please prepare your item or basket as soon as possible, so we can at least advertise some things that will be auctioned. Inviting the LEC staff should make this auction even more fun than usual. Grab a friend, make a basket, and join us for a wonderful auction.

If you are not able to participate, we welcome donations for the scholarship fund.

Andrea Donilla  
Auction Chairperson
Join Us for Remaining Meetings of FCREA

We have some great programs scheduled for the remaining of the year. We are excited that our November Scholarship/Awards Auction will be held at the FCBOE Board Room, and that the staff of LEC will be invited to attend. Ms. Patty Brown will again be our auctioneer. We are adding a January meeting this year featuring information about the DEA which will be at the Teacher Resource Center at LEC. We will be learning about Essential Oils from our own Dr. Cathy Geis in February. The March Cluster meeting will include Ms. Joyce Rosemon to talk about Comfort Bear. In April, we will have the installation of officers and Ms. Nadia Theodore, Consul General of Canada will be the presenter. Finally, in May, we will have our wonderful Scholarship/Awards Luncheon. Dr. Julie Turner will bring us a school system update. What a great list of meetings to attend. Put these meetings on your calendar and bring a retired friend!!
FCREA GOALS for 2019-2020

- Support the State President’s *Cheering for GREA* theme and humanitarian project, *Alzheimer’s Organization*.
- Increase FCREA membership by 10%
- Strive to meet the requirements to achieve the GREA Unit of Distinction.
- Collaborate with the Fayette County Schools Superintendent and other school officials to use FCBOE electronic mediums to provide an awareness throughout the school community of the mission, goals, and outreach projects of FCREA.
- Implement projects and/or activities for member recruitment, engagement, and retention.
- Encourage members to wear FCREA shirts to meetings, community activities, and/or service projects to create our FCREA brand in the community.
- Implement FCREA community projects.

**November and December Birthdays**

Maxine Patterson – 11/19  
Marilyn Taylor – 11/24  
Carolyn Pitts – 11/28  
George Hood – 11/29  
Diane Lattimore – 12/7  
Susie Lusko – 12/9  
Nancy Wortman – 12/21  
Kristi Goss – 12/25  
Sandi McCallie – 12/27

**For Your Information:**

It is open enrollment season for your Medicare advantage programs.

There are some Medicare Advantage Plan Meetings in Fayetteville at Piccadilly at 955 North Glenn St. on the following days:

- Oct. 29, 2019 – 9:30 AM  
- Nov. 12, 2019 – 9:30 AM  
- Dec. 3, 2019 – 9:30 AM
Membership
Recruit, Reclaim, Renew!!!

To earn a *Unit of Excellence* award each year, we must increase our GREA membership by 10%. That means we need **37 new GREA members.** We have **13 new members so far** and have until April to recruit **24 more new members.** Please help us by inviting a newly retired educator, an inactive member, or another retiree who is not a member to join FCREA and GREA. If you are a member of FCREA, but not GREA, we encourage you to join. We have many members, and we want to grow the numbers who regularly attend our meetings. It is fun to see old friends and enjoy the fellowship during our meetings, so please come and invite a retired friend to attend each month.

We need your help!

We need you to join FCREA and GREA!! Dues for FCREA are $15 per year- and you must rejoin each year unless you join for life. GREA dues are $27 per year. You can save money if you join GREA through **Automatic Dues Deduction (ADD)** of $2 per month. The $2 is automatically deducted from your TRS check and renewed each year. You never miss it. FCREA can earn money from GREA when retirees pay through ADD. Now’s a good time to be ADD!!! Sign up using the link below!

https://www.fayettegaretirededucators.org/membership

Festival of Trees at Arbor Terrace

We have an exciting opportunity to repay Arbor Terrace for their hospitality. They graciously provided us with a meeting place and a wonderful luncheon several times over the years. We will sponsor a decorated Christmas tree for their annual Festival of Trees. We need to put up our tree and decorate it between Thanksgiving and December 2nd. Please bring any school or teacher related decorations you want to donate for our tree to our November meeting. Also let Sandra Watson know if you can help place and decorate the tree.
How Does This Thing Called The Internet Work?

And What Happens When You Click?

We take the Internet for granted, using it as naturally as we use electricity or city water. If you were to look at what is “on the net” or “in the cloud” you would find an elegantly simple yet infinitely complex system. So, what happens when you click a link or send an email?

In Computerland, a network is two or more computers that can communicate with each other or, on a larger scale, a system of computers and servers that communicate with each other. “Internet” stands for “interconnected networks” because it’s really a network of networks. The computers in your home or office are connected in a local network and that network is connected to another network operated by your Internet Service Provider (ISP). Now the network of your ISP is connected to other ISPs’ networks. Those networks may consist of many different types of computers. That’s the hardware or physical view of the Internet.

A variety of physical media can be used to make the connections within a network: ethernet cable, telephone or power transmission lines, radio signals (satellite or Wi-Fi), and beams of visible light (fiber optics) are all the same to the Internet. The key thing is that a medium is capable of transmitting information according to the protocols of the Internet.

A protocol, on or off the Internet, is an agreed language for communicating, and a set of rules for doing something. There are fire drill protocols; CPR protocols; Dinner-Without-the-Queen protocols, and Internet Protocol. Have you heard of an IP? That is the Internet Protocol. Just like your home address, your devices have a location assigned to them called an IP address. Every device that you use - computer, tablet, phone, etc. – that connects to the Internet all have an address called an IP address.

Have you heard of TCP/IP? IP determines where data goes and how it travels; TCP makes sure it gets there quickly and intact. The Internet Protocol is the set of rules followed to deliver data from point A to point B on the Internet based on the destination machine’s IP address. TCP stands for Transmission Control Protocol; it is the set of rules followed to ensure fast, error-checked transmission of data between two points on the Internet.

A numeric IP address is similar to the address written on a postcard. Applying the rules of the Internet Protocol to an IP address should get data from the sending machine (called the host) to the one with that IP address. These addressing and routing rules are found in the Domain Name System (DNS).

The core of the DNS is a huge, two-column table of domain names and IP addresses. When you type “hc-rea.org” into your browser’s address bar, here is what happens: The browser sends “hc-rea.org” to a DNS server along with a request: “What’s the IP address that corresponds to ‘hcrea.org?’” The DNS server consults its table and sends the answer, if it has one. If the DNS server can’t find the answer, it sends the request to a higher-level DNS server that has more names and addresses. The request keeps getting kicked up to a higher-level DNS server until the answer is found, if it exists. In the whole wide world, there are only 13 “root” DNS servers that know every name and address pair; most DNS requests are resolved or successfully answered at much lower levels.

When your browser receives the correct IP address, it then sends a request for Web content to that address using the HTTP (hypertext transfer protocol) or HTTPS (http SECURE protocol). HTTPS requires that certain measures are taken to protect the privacy of communications. When the Web server at that IP address gets the request, it collects the requested data and sends it back to the requesting browser’s IP address.

So, let’s clear up a misconception. You don’t really “go to” a Web page. Instead, Web pages come to you in response to your browser’s requests. It is like packages that come to you from Amazon in response to your purchase orders. So, here is my best analogy…You send a letter from New York to Paris asking for a picture of the Eiffel Tower.

Someone in Paris receives that request and sends back a letter with the photo. So, you have gotten the photo of the Eiffel Tower, but you never actually visited Paris.

A Web page may consist of thousands or millions of bytes of data. They don’t all arrive at once in one huge package. The data your browser requests is broken up into blocks of 1,000 to 1,500 bytes. Each block is packaged with header and footer information that specify where it’s going, what larger body of data it comes from, and where it fits in the jigsaw puzzle of blocks that will have to be re-assembled at the destination address.

Data blocks don’t necessarily follow each other in single file over the same path from a server to the machine that requested them. Instead, each packet of data is sent along the path of least resistance (or fastest speed) by each router that handles it on its way back to you. So, the letter in my analogy above would actually be torn into bits with each data byte labelled with the destination address, sent on the way to its destination and then re-assembled upon
arrival. The illusion that you are visiting a website in Paris to get a photo of the Eiffel Tower is created by software.

In theory, any data travelling across the Internet can be seen by persons who have access to the computers or routers in the local network or Internet backbone. On a public Wi-Fi connection, you are even more exposed, because everything you can see in your web browser or email program is also visible to others on the same Wi-Fi network. In practical terms, that means everyone in the same coffee shop, airport lounge, library or hotel can see what you see and send.

The answer to web security is encryption. When the web address shown in your browser says HTTPS instead of HTTP, that means your data is encrypted before hitting the Internet. To anyone who might be “sniffing” it will appear as a random jumble of numbers and letters.

The HTTPS protocol combines HTTP with a security protocol called TLS/SSL. Actually, TLS (or Transport Layer Security) is a modern, more secure replacement for SSL (Secure Sockets Layer), but both are commonly used and so appear together. Using digital certificates and public key encryption technology, TLS/SSL will first authenticate the destination server, verifying that it is indeed “hc-rea.org” and not a malware-spewing imposter. Then an encrypted “tunnel” is created between the destination server and the requesting host machine. Through this encrypted tunnel data exchanged is safe from eavesdropping. The math involved is incredibly complex, but we won’t go there.

The more authentication, encryption and decryption of data that is added to an Internet communication stream and the machines on each end the slower the Web may seem. However, the added security and privacy are more than worth the sacrifice. Using a secure HTTPS connection is pretty much standard for most websites these days.

So that’s a simple look at the complex happenings under the hood of the Internet when you surf the Web, send emails and chat with friends.

So now for a history lesson and a brief summary of how the Internet is managed today. ARPANET, the precursor to the Internet, was developed in the late 1960s and early 1970s. It was a cooperative effort of the US Department of Defense, several universities, and private corporations. By the early 1980s, a set of standards for connecting diverse networks around the world was developed and became known as the Internet.

In 1992, The Internet Society was formed as a non-profit organization to provide leadership for the development and use of the Internet. The Internet Engineering Task Force (IETF), which operates under the auspices of the Internet Society, develops and promotes Internet standards and protocols. In 1998, The Internet Corporation for Assigned Names and Numbers (ICANN) was formed to coordinate the management of the Internet Domain Name System (DNS), pursuant to an agreement with the IETF. The Internet Assigned Numbers Authority (IANA) is a department of ICANN that oversees IP address allocation globally and manages the root DNS servers.

Who made the Internet happen? Names like Bob Taylor, Vint Cerf (known as the Father of the Internet), Bob Kahn and J.C.R. Licklider are at the forefront. Want to know more? Take a look at the Internet Society’s History of the Internet page, https://www.internetsociety.org/internet/history-internet.

Barbara Nanney
Henry County Retired Educators Association

See you on November 14 for our annual Scholarship Auction at the FCBOE Board Room. Bring a retired friend for a fun time at the auction.

HAPPY THANKSGIVING

Give Thanks