

**APRIL 2004 MEETING**

- DATE:** Tuesday, April 20, 2004,
- TOPIC:** Bell X22A Aircraft-1st Flight Tests
- SPEAKER:** Stanley J. Kakol, Captian
U.S. Navy Retired
- TIME:** 11:30 AM
- LOCATION:** Unity Center of Cincinnati
1401 East McMillan
Cincinnati, Ohio
- MENU:** Baked Ham in Pineapple, Potato
Casserole, Seasoned Green Beans,
Tossed Garden Salad, with Assorted
Dressings, Assorted Rolls with Butter,
Apple Pie
- COST:** \$12.00 per person
- RESERVATIONS:**

Make check payable to "RESC"
Send six days in advance to:
Art T. Kupferle
2769 Blackberry Trail
Cincinnati, Ohio 45233-1721
Phone 513-922-0385

Please Use Reservation Form on Back Page.

APRIL 2004 TOUR

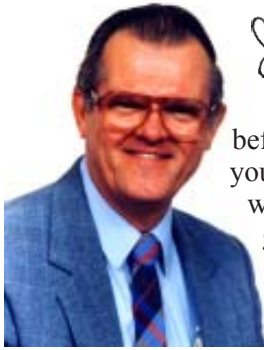
**There is no tour scheduled
for April.**

The Dollar Bill

Take out a one dollar bill, and look at it. The one dollar bill you're looking at first came off the presses in 1957 in its present design. This so-called paper money is in fact a cotton and linen blend, with red and blue minute silk fibers running through it. It is actually material. We've all washed it without it falling apart. A special blend of ink is used, the contents we will never know. It is overprinted with symbols and then it is starched to make it water resistant and pressed to give it that nice crisp look.

If you look on the front of the bill, you will see the United States Treasury Seal. On the top you will see the scales for a balanced budget. In the center you have a carpenter's square, a tool used for an even cut. Underneath is the Key to the United States Treasury. That's all pretty easy to figure out, but what is on the back of that dollar bill is something we should all know.

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Jack Clock

Well it won't be long before opening day, but you sure can't tell it by the weather. March may not go out like a lamb this year.

Sorry that we have no tour this month. We had several possibilities but they could not be setup in time. I am working hard to find a May tour to close out this program year.

We will be having elections at the April meeting. Please see the bio's on Jan Gisslen and Bob Eberts on the insert in this newsletter. We will also accept nominations from the floor.

We have a very interesting speaker for this month's meeting. He is Mr. Stan Kakol, a former test plot who worked for GE, Bell Aerospace and others. OK, all you retired GE people, this one should be right down your alley. I am attempting to get this newsletter out early, to allow more time to register, so we expect to see you at this meeting.

On March 23rd, I am going to a presentation at the old *Voice of America* in West Chester, Ohio. The presentation will be about the Gray Radio Museum, formerly housed at WCET. It will now be part of the VOA museum when it is completed. They are currently looking for docents to give tours of this facility. If interested, please contact me for further information.

See you at the April meeting.



Ruth and Art Kupferle accept a certificate of appreciation for their presentation at the March 2004 luncheon meeting.

2003-2004 Officers Retired Engineers & Scientists

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If you turn the bill over, you will see two circles. Both circles, together, comprise the Great Seal of the United States. The First Continental Congress requested that Benjamin Franklin and a group of men come up with a Seal. It took them four years to accomplish this task and another two years to get it approved.

If you look at the left-hand circle, you will see a Pyramid. Notice the face is lighted, and the western side is dark. This country was just beginning. We had not begun to explore the West or decided what we could do for Western Civilization. The Pyramid is uncapped, again signifying that we were not even close to being finished. Inside the capstone you have the all-seeing eye, an ancient symbol for divinity. It was Franklin's belief that one man couldn't do it alone, but a group of men, with the help of God, could do anything.

"IN GOD WE TRUST" is on this currency. The Latin above the pyramid, ANNUIT COEPTIS, means, "God has favored our undertaking." The Latin below the pyramid, NOVUS ORDO SECLORUM, means, "a new order has begun." At the base of the pyramid is the Roman Numeral for 1776. If you look at the right-hand circle, and check it carefully, you will learn that it is on every National Cemetery in the United States. It is also on the Parade of Flags Walkway at the Bushnell, Florida National Cemetery, and is the

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Meeting Highlights



Our speaker this month is Stanley J. Kakol, Captain, U.S. Navy Retired. He also retired from GE in 1999 as Manager, Flight Test Support for the McDonnell Douglas MD11 and Boeing aircraft powered by CFM 56 and CF6-80C2 engines. He is a charter

member of the National Aviation Hall of Fame, was inducted into the Niagara Frontier Aviation Hall of Fame in 1996, nominated to the Ohio Veterans Hall of Fame in 2001, and is an Associate Fellow of the Society of Experimental Test Pilots (SETP).

Mr. Kakol has flown more than 40 different aircraft amassing over 20,000 flight hours, 1800 of them in flight tests. He has received numerous commendations within the industry for his contributions to flight and technical presentations including an SETP Symposium, East Coast Section

As pilot for Bell he made the first flight and first 100 hours of the X-22A, Vertical Short Take Off/Landing (V/STOL). He will narrate video footage of these flight tests including a successful emergency (exciting) landing.

Stan is a 1947 graduate of the US Navy Flight School and served a tour of duty with a patrol squadron flying the PB4Y-2. Joining Bell in 1949 he worked as a Design Engineer on guided missile programs but was recalled to duty as a helicopter pilot during the Korean conflict. He was then assigned to VX-1 (Air Development Squadron 1) as Project Pilot in the low altitude night searchlight and autopilot evaluation on the only Douglas AD-5S aircraft.

He joined GE in 1958 as an Engineering Test Pilot for development flight tests of GE-T-58 turbo-shaft engines on the test bed helicopters HSS-1F and HSS-2 and their respective civil versions S-58T and S-61 (President's chopper). He returned to Bell for the X-22A tests.

He left Bell for Overseas National Airways (ONA) as a Lockheed Electra Captain and later was upgraded to DC-9. From there he became an Engineering Test Pilot with the FAA. He rejoined GE in 1983 as test pilot assigned to Spain's CN235 regional air transport made by Construcciones Aeronauticas, SA (CASA). He demonstrated this aircraft in the 1984 Farnborough (England) Air Show and the 1985 Paris Air Show.

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centerpiece of most hero's monuments. Slightly modified, it is the seal of the President of the United States, and it is always visible whenever he speaks. Yet very few people know what the symbols mean.

The Bald Eagle was selected as a symbol for victory for two reasons: First, he is not afraid of a storm; he is strong, and he is smart enough to soar above it. Secondly, he wears no material crown. We had just broken from the King of England. Also, notice the shield is unsupported. This country can now stand on its own. At the top of that shield you have a white bar signifying congress, a unifying factor. We were coming together as one nation. In the Eagle's beak you will read, "E PLURIBUS UNUM", meaning, "one nation from many people."

Above the Eagle, you have thirteen stars, representing the thirteen original colonies, and any clouds of misunderstanding rolling away. Again, we were coming together as one. Notice what the Eagle holds in his talons. He holds an olive branch and arrows. This country wants peace, but we will never be afraid to fight to preserve peace. The Eagle always wants to face the olive branch, but in time of war, his gaze turns toward the arrows.

They say that the number 13 is an unlucky number. This is almost a worldwide belief. You will usually never see a room numbered 13, or any hotels or motels with a 13th floor. But think about this: 13 original colonies, 13 signers of the Declaration of Independence, 13 stripes on our flag, 13 steps on the Pyramid, 13 letters in the Latin above, 13 letters in "E PLURIBUS UNUM," 13 stars above the Eagle, 13 bars on that shield, 13 leaves on the olive branch, 13 fruits, and if you look closely, 13 arrows. And, for minorities: the 13th Amendment.

I always ask people, "Why don't you know this?" Your children don't know this, and their history teachers don't know this. Too many veterans have given up too much to ever let the meaning fade. Many veterans remember coming home to an America that didn't care. Too many veterans never came home at all.

Share this page with others, so they can learn what is on the back of the UNITED STATES ONE DOLLAR BILL, and what it stands for... Otherwise, they may never know.

Eds: This article was ead at the February 2004 meeting. Many people have requested copies of it so the logical thing to do was to put it in the newsletter.

RESC

c/o Arthur T. Kupferle
2769 Blackberry Trail
Cincinnati, OH 45233-1721

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April 20, 2004 Luncheon Reservation / Dues Payment Form

For a reservation: Mail for receipt by April 16, 2004.

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**No charge when attending first meeting*

Guest Name _____ @ \$12.00 _____

Membership Annual Dues _____ @ \$12.00 _____

2004 Golf Dues @ \$5.00 _____

Total \$ _____

Member's EMAIL Address _____

Mail to

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Cincinnati, OH 45233-1721

CANDIDATES FOR ELECTION TO THE RESC BOARD

- **Jan Gisslen is the candidate for 2nd vice-president. He will fill the position now held by Harold Rice.**
- **Robert Eberts is the candidate for secretary. He will replace Lee Hite.**

As candidates they will be introduced and voted upon at the April meeting. They will take office at the May Luncheon. Other nominations can be made from the floor.

JAN M. GISSLÉN

Born in Ragunda, Jämtland, Sweden in 1928

BSME in Mechanical Engineering 1949

Military Service 1949-1950

Design Engineer with Svenska Flygmotor AB, Trollhättan 1951 —1953. Worked on the design of Aircraft Engines and with converting DeHavilland and Rolls Royce engine designs from the inch system to the metric system.

Design Engineer with SAAB, Trollhättan 1953 — 1955. Here he handled the design of the two stroke—three cylinder engine and the installation of the engine and gearbox into the SAAB 93 car.

Design Engineer with Scania Vabis in Södertälje, Sweden 1955 —1956. Here he designed various components for the engine to be powering large dumptrucks and tractors for semi-trucks.

In May 1956 Jan moved to the USA. He was hired by GE and started to work there in July 1956 in what then was called the “Flight Propulsion Laboratory Department”.

He worked as a design engineer with GEAE in Evendale Ohio from 1956 to 1990. During this time he had many different design and management responsibilities, working on preliminary designs for everything from space power engines to aircraft engines to stationary gas turbines. He had the responsibility for the exhaust nozzle for the US SST. He did a lot of work on attempting to train management and willing listeners on the bottom line value of the different technologies that GE was working on. Based on the results from this, management decided which technologies they would pursue. In 1990 he retired from this position at GE.

In retirement he has keep busy by doing quite a lot of woodworking. He has a complete workshop and a tree farm in Indiana. On the tree farm he grows the material used for his woodworking. He has a sawmill there where he rough saws the boards used in his shop. At one time he had thought about going into the sawmill business, but decided that he did not have the time to do it all. He is now content to just work in his shop and attend the RESC meetings.

ROBERT E. EBERTS

- Born:** May 30, 1931, Columbus Ohio, Married, 5 children
- Education:** St. Charles Prep School, Columbus Ohio, 1949
B.S. Chemistry, University of Dayton, 1953
Ph.D. Physical Chemistry. Iowa State University, 1957
Thesis was on Calorimetry and Chemistry of rare earth salts
- 1953-1957 Was graduate assistant at Ames Laboratory. USAEC
- 1957-1962 Joined Wyandotte Chemicals Corp. (later BASF) as a Research Chemist, Inorganic Research Dept. worked on synthetic calcium carbonate paper coating pigments; lab, pilot plant, production.
- 1962-1969 Moved to Boston with National Research Corp., which became Norton Company, Metals Division. As Senior Chemist. Chemical R & D was involved in tantalum metal production from ore to purification to fused salt reduction.
- 1966 Framingham State College taught course as Visiting Lecturer 1969-1970 – Joined Arthur D. Little, Inc as Consulting Staff, Engineering Div. Variety of technical projects.
- 1971-1996 Moved north of N.Y. City with The Mearl Corporation, in the Pigments Division. Company produced pearlescent pigments. My special area was bismuth oxychloride, used mainly in cosmetics. Major product was titanium oxide coated mica pigments used in cosmetics and plastics, but largest use was to give pearlescent and metallic look in auto motive paint.

By 1990 plant employment was over 300 people in production, engineering, maintenance, shipping, quality control, inventory management, research and development

Held varied of positions over my 25-year tenure:

- 71-73 Senior Development Chemist
- 73-87 Group Leader
- 84-91 Corporate Environmental and Regulatory Affairs
- 87-89 Department Head Chemical R&D/ Process Engineering/Computer Group Environmental Engineering/ MSDS Chemist
- 90-94 Assistant Plant Manager
- 94-96 Plant Manager

1997 Retired, Moved to Cincinnati with wife, Louise Pastimes: Bowling. Gardening (esp. dahlias), Golf, Bridge, Musicals, plays, museums and other area attractions

Publications: 6 US Patents
4 Journal Articles
2 USAEC Reports

Memberships: American Chemical Society
American Institute of Chemists
RESC since 2000