

# EXPLORER POST 303

**STRENGTHEN AMERICA**



***SCOUTING***  
***CAN MAKE THE DIFFERENCE***

SPONSORED BY  
GE AIRCRAFT ENGINES



The oldest and largest Explorer Post in the State of Ohio, ELFUND sponsored Post 303 was organized in the late 1950's. Initially, this group was organized mainly to study various fields of science involving chemistry and astronomy. However, in 1963 the Atomic Energy Merit Badge Program was begun with approximately 50 - 60 Scouts and Explorers, mainly boys of high school age, attending the initial introductory meeting. This meeting was then followed by a succession of meetings which carried on through the year to about April or May.

# 1958

## POST 303 CHARTER

## SCOUT ROSTER

## COMMITTEE ROSTER

[illegible][illegible]



At each meeting, a lecture was given by one of the nuclear scientists from the General Electric Company covering all of the requirements of the Atomic Energy Merit Badge. One of the more important supplemental features of the program was the experimental program wherein the boys did actual experiments with radioactive substances to allow them to do radiography experiments. Another experiment which some of the boys attempted involved construction and use of geiger counters, cloud chambers, electrosopes, and isotope models. This program resulted in the awarding at a graduation ceremony in May 1964 of 40 Atomic Energy Merit Badges.



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ATOMIC ENERGY  
610511



## NEW MERIT BADGE REQUIREMENTS

(Printed originally in October 1963 issue of SCOUTING Magazine)

Scientific-minded Scouts and Explorers will welcome new merit badges in Atomic Energy and Electronics. The requirements for both badges are included in the 1964 Boy Scout Requirements booklet, being released this fall. Pamphlets will be available early next year, but where counselors are available, the badges may be earned immediately.

### Atomic Energy Requirements

- Be able to tell your merit badge counselor in your own words the meaning of the following words or terms: Alpha particle, atom, background radiation, beta particle, Curie, fallout, fission, fusion, gamma ray, half-life, dosimeter, ionization, isotope, neutron activation, nuclear reactor, particle accelerator, radiation, radioactivity, Roentgen, X-ray.
- Construct three dimensional models of the atom of the three isotopes of hydrogen, showing neutrons, protons, and electrons. Use these models to explain to your counselor the difference between atomic weight and atomic number.
- Draw a diagram showing how nuclear fission happens and label the fissionable material, all neutrons, and the fission products. Draw a second picture showing how a chain reaction could be started and how it could be stopped. Show the drawings to your merit badge counselor and be prepared to demonstrate using simple material what is meant by a "critical mass" of fissionable material.
- Be able to tell your counselor who five of the following people were and explain what each of the five discovered about atomic energy, nuclear reactions, or radiation: Henri Becquerel, Niels Bohr, Marie Curie, Albert Einstein, Enrico Fermi, Otto Hahn, Ernest O. Lawrence, Lisa Meitner, William J. McGowan, Ernest Rutherford. Explain, to the satisfaction of your merit badge counselor, how any one person's discovery was related to one other person's work.
- Draw the standard radiation hazard symbol in the proper colors and explain in your own words, to the satisfaction of your

counselor, where the symbol should be used and when it should not be used. Be able to tell your counselor why and how people must use radiation or radioactive materials carefully.

- Do any three of the following:
  - Build an electroscope using simple material. Show your counselor how it works. Put a radiation source inside the electroscope and explain to your counselor any difference observed.
  - Make a simple geiger counter and tell your counselor which parts are the detector, the amplifier, and the indicator. Tell your counselor which type of radiation the counter can detect and how many counts per minute of what radiation you have detected in your home with the geiger counter.
  - Build a model of a nuclear reactor showing the nuclear fuel, the control rods, the radiation shielding, the moderator, and any cooling systems. Explain, to the satisfaction of your counselor, how a nuclear reactor could be used to transform nuclear energy into electrical energy or to make things radioactive.
  - Using a geiger counter (that you have built or borrowed) and a radiation source, show your merit badge counselor how the counts per minute change as the radiation source gets closer to the detector. Place at least three different kinds of material between the source and the detector and explain to your counselor any differences in the counts per minute. Tell your counselor which material you would recommend to shield people from radiation and why.
- Using fast-speed film and a radiation source, conduct an experiment illustrating the principles of autoradiography and radiography and show the results to your counselor. Explain it in your own words, to the satisfaction of your counselor, what happened in the film and how someone could use this technique in medicine, research or industry.
- Using a geiger counter (that you have built or borrowed) find a radiation source that your merit badge counselor has hidden under a covering. Repeat the experiment with your counselor for at least three other locations under the cover and draw on a map (representing the cover) the movement and locations of the source. Explain in your own words, to the satisfaction of your counselor, how someone could use this technique in medicine, research, agriculture, or industry.
- Arrange, with the assistance of your merit badge counselor, to visit a dentist, physician, veterinarian, or

hospital where x-ray equipment is used. Draw a floor plan of the room in which the x-ray equipment is used, showing where the unit, the operator of the unit, and the patient would be when it is used. Show your floor plan to your counselor and be prepared to discuss with him the radiation hazards from the x-ray equipment.

- Make a cloud chamber, using simple material. Show your merit badge counselor how the chamber can be used to see the tracks caused by radiation and explain in your own words, to his satisfaction, what is happening.
- Arrange, with the assistance of your merit badge counselor, to visit an industrial plant or research laboratory where radioscopes are being used. Explain, by drawing a simple diagram, how and why the radioscope is used.
- Obtain samples of irradiated seeds and plant them, with a control group of nonirradiated seeds of the same type, and grow both to maturity under the same conditions. Observe and catalogue any differences and be prepared to discuss the effects of irradiation of seeds with your counselor.

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### SUGGESTED PROCEDURES FOR ATOMIC ENERGY MERIT BADGE QUALIFICATION

- Candidate first scans all material he can use to satisfy the badge requirements. Then he may ask his Scoutmaster or Advisor to provide him badge applications.
- Unit leader issues an application form after verifying that candidate has scanned the packet materials. Leader also directs candidate to appropriate Scout Council.
- Scout supplies name and telephone numbers of counselors in candidate's area. Candidate obtains an interview with counselor at time and place convenient to counselor.
- At initial interview, counselor verifies that candidate has packet, knows where to obtain additional information, and has developed logical plan for completing the requirements of the badge. Before interview plan for completing the requirements of the badge, before interview candidate should have obtained fairly accurate impression of candidate's understanding of general science, so that he can guide him into additional reading and towards those requirements projects best suited to his understanding, resources and needs.
- Candidate presents himself for interim interview, at which counselor may wish to examine him on first five requirements, advise him on solving whatever Requirement 6 problems may have arisen, and point out





# 1964

## POST 303 CHARTER

### COMMITTEE ROSTER

### SCOUT ROSTER

CHECK ONE: ☒ APPLICATION FOR CHARTER ☐ ADDITIONAL ENROLLMENT  
OFFICE COPY FOR TRANSMITTAL TO NATIONAL OFFICE BOY SCOUTS OF AMERICA

POST No. 303  
Type of unit: VALLEY  
City: CINCINNATI  
County: HAMILTON  
State: OHIO  
Expiration date of unit: 11/30/64

INSTITUTION, ORGANIZATION, OR GROUP OF CITIZENS APPLYING FOR CHARTER  
COMPLETE FOR CHARTER APPLICANTS ONLY  
(If a religious body, state denomination or sect.)  
NAME: GENERAL ELECTRIC COMPANY FLIGHT PROPULSION DIVISION WED.  
ADDRESS: CINCINNATI 15, OHIO (EVENDALE) Mail route: G.E. EVENDALE PLANT, WED. 1130  
EXECUTIVE OFFICER: D. SHAW TITLE: GENERAL MANAGER TEL: 761-4102  
ADDRESS: CINCINNATI 15, OHIO

CERTIFICATION OF THE SCOUT EXECUTIVE

The undersigned has reviewed and approved the original application bearing the personal signatures of the adults registered below. We transmit herewith \$2.00 membership fee for one year (or a portion less, half of which is to cover subscription to SCOUTING magazine for the period of membership for each adult listed below).

FULL NAME (Please type, do not use initials)	MAIL ADDRESS (Street and Number)	CITY, STATE, AND ZIP CODE	TELEPHONE	Age	Sex	Religion	Signature	Date
GEORGE M. HUNTINGER	215 FOREST CINCINNATI 15, OHIO	40	761-7400	39	P	SR		
THEODORE B. ELLIS	725 DECATUR CT. "	24	761-4100	35	P	RE		
WALTER J. FREY	5931 BELMONT "	36	761-4100	56	P	RE		
EVERETT C. FOSTER	6868 STOLL LN. "	15	761-4069	46	C	TR		
VINCENT P. CALKINS	570 REILLY RD. "	15	761-4100	31	P	RE		
JACK W. CLARK	1109 CENTER MILFORD OHIO		441-1830	43	C	RO		
EARL T. BERNING	556 MILLER HIGHLAND HEIGHTS OHIO		821-7400	48	P	SR		
STUART A. LEIGHTON	3706 BROCKTON CINCINNATI 39, OHIO		521-9346	41	P	SR		
ROBERT C. RAU	3910 TAFT AVE CINCINNATI 11, OHIO		682-2559	28	P	SR		
HENRY PHILLIPS	10810 GOSLIN RD. "	39	761-4100	44	P	RE		
ALLEN BOLENDER	2444 DORIAN DR. "	15	821-2504	20	C	RE		

IF THIS IS NOT AN APPLICATION FOR CHARTER  
CHECK ☐ ADDITIONAL ENROLLMENT ☐ BOY'S LIFE ORDER

Type of unit: POST Local No. 303  
City: CINCINNATI State: OHIO  
District: VALLEY County: HAMILTON  
Expiration date of unit: 11/30/64

BOY'S LIFE SUBSCRIPTION INFORMATION  
Number of Subscriptions: Paid: Complimentary: Total:  
Subscription Term: Months: First Issue: Last Issue:

BOY MEMBERSHIP

First Name Initial	Last Name	Street or R.F.D.	City, Town, and State	Age	Sex	Religion	Signature	Date
1	KEN BAKER							
2	JAMES BERNAT							
3	TOM BERNING							
4	DENNY CROPPER							
5	ANDY CURLEY							
6	MIKE JACOBS							
7	JOE KROGER							
8	STEVE LEVITS							
9	RUSSELL SELLERS							
10	JAY WALKER							
11	ALAN STOKES							
12	LARRY HAYES							
13	JOHN KLEMMANN							
14	FRANK STEGEMAN							
15	HANK RIGGS							
16	EDGERDING							

PLEASE CHECK ☐ YES ☐ NO

FOR NATIONAL OFFICE USE ONLY  
Name: Age: Sex: Religion: Total:



# The Night GE-Sponsored Explorer Scouts Made History

On the evening of April 2, members of Cincinnati's Advanced Explorer Post 303, sponsored by General Electric at Evendale, along with other Scouts from parts of Ohio and Kentucky, made the news.

They were the first young men in the history of boy scouting to be awarded merit badges in metallurgy.

For the occasion, the local chapter of the American Society of Metals staged appropriate

and impressive ceremonies at the Engineering Society of Cincinnati's McMillan Avenue building. Among the honored guests attending were Fred P. Strother, National Council, Boy Scouts of America and Dr. Stewart G. Fletcher, Vice President and Technical Director of Latrobe Steel, Latrobe, Pennsylvania.

Ned Herrmann, Manager — Employees and Community Relations for the Evendale plant represented General Electric and presented the 67 young men who earned the first coveted merit badges in metallurgy with special certi-

icates, prepared for the occasion.

About one-third of the young metallurgists are the sons of GE people. And GE people played a large and important role in helping to make the night memorable. NM&PO's Manager — Employee Relations, George Hunsinger, was the able Master of Ceremonies for the Awards Program. Walter G. Baxter, NM&PO was the program Chairman.

All of the glamour, color and excitement of the memorable evening was documented by General Electric photographer John Weisman.

**PRESENTING THE COLORS** — The National Emblem and participating Troop and Post standards were presented at the start of the ceremonies.

April 2, 1965



**NED HERRMANN**, Manager-Employee and Community Relations at Evendale General Electric, admires one of the hard-earned Metallurgy Merit Badges. The trimly uniformed Explorer Scouts are Donn Storch, Ken Hausner, Tom Pence, Dick Burns and Dave Reed. Mr. Herrmann presented all merit badge recipients with their formal certificates, especially prepared for the occasion.



**"BACKSTAGE" WORKERS AND "STARS"** — With the ceremonies over, this group of hard-working GE men who spent months planning and organizing the event, chatted with a few of the young metallurgists. Front row: Bob Rau, Post 303 Advisor, with Rod and Greg Calkins, of Wyoming Troop 490. Back row: Stu Leighton, Buck Jordan, Paul Pomeroy of Wyoming Troop 482, his Dad, George Pomeroy, Dr. Vincent Calkins, Walter Baxter and George Hunsinger.



**PROUD GE FATHERS AND HONORED SONS** — GE families posed for this photo a few minutes after the close of the ceremonies. In the front row, in the usual order: Gary Green, Rod Calkins, Dr. Vincent Calkins, Greg Calkins, Bob Berning and Earl Berning. Middle row: Charles Green, Paul Pomeroy, Jon Sells, Rick Jordan, Elliot Chase and Dave Reed. Back row: Ted Lewtas, George Pomeroy, Bert Sells, Buck Jordan, George Chase and Ken Reed.



# American Society for Metals

and

## THE BOY SCOUTS OF AMERICA

"The FIRST NATIONAL AWARDS for METALLURGY MERIT BADGE"

FRIDAY EVENING • APRIL 2, 1965

Engineer Society Headquarters • 1349 East McMillian St.

5:30 - 6:00 p.m. INFORMAL RECEPTION

6:00 - 7:00 p.m. DINNER\* - INVOCATION

7:00 - 7:45 p.m. LOCAL PROGRAM HIGHLIGHTS

### WELCOME - INTRODUCTIONS

Mr. R. Baughman, Chairman - Cincinnati Chapter

American Society for Metals

Mr. Basil Starkey, Executive Officer - Dan Beard Council

Boy Scouts of America

8:00 p.m.\*\* MAIN PROGRAM - INTRODUCTIONS

Mr. George Hunsinger - General Electric Company

Institutional Representative BSA - Explorer Post 303

### PRINCIPAL SPEAKER: Dr. M. Eugene Merchant

Director of Scientific Research

Cincinnati Milling Machine Company

SUBJECT: "METALLURGY—A CHALLENGE TO YOUTH"

### PRESENTATION OF AWARDS



### HONORED GUESTS

Dr. Stuart Fletcher, Vice President Technical Director  
Latrobe Steel Co., Latrobe, Pa.

President Elect-American Society of Metals

Mr. Fred P. Strother, National Council-Boy Scouts of Am.

Boy Scouts of America-National Hq.

New Brunswick, New Jersey

Mr. Allan R. Putnam, Executive Secretary-ASM

Metals Park Ohio

Mr. T. C. DuMond, Chapter Representative-ASM

Metals Park Ohio

Mr. William Hubbell, Region Four Executive-

Boy Scouts of Am., Cincinnati, Ohio

Mr. Dwight Thompson, President-Dan Beard Council

Boy Scouts of America-Cincinnati, Ohio

Mr. R. G. Lewis

President-Engineering Society of America



Dr. M. Eugene Merchant

M. Eugene Merchant was born in New England. After completing his undergraduate education in mechanical engineering at the University of Vermont, he joined the Cincinnati Milling Machine Company and received his Doctor of Science degree at the University of Cincinnati in 1941. His research activities include basic and applied research on metal cutting, cutting fluids, friction, wear and lubrication, and he has presented and published numerous papers on these subjects.

In 1955 he was chosen as Cincinnati's "Engineer of the Year" by the Technical and Scientific Societies Council of Cincinnati, and in 1959 he received the Richards Memorial Award of the American Society of Mechanical Engineers and the National Award of the American Society of Lubrication Engineers. He is a Past National President of the American Society of Lubrication Engineers and a Past President of the Engineering Society of Cincinnati. Dr. Merchant is a member of Phi Beta Kappa, Tau Beta Pi, and Sigma Xi.

Dr. Merchant is active in Scouting and is holder of the Silver Beaver Award. He has been active in Scouting (as a scout, cubmaster, scoutmaster and district commissioner) for over 25 years. He is presently Assistant Scout Commissioner responsible for Eastern Service Area of the Dan Beard Council, a committeeman for Explorer Post 149 in Mariemont, and a merit badge counselor. He has accompanied the explorers of post 149 on their regular canoe trips into the Canadian wilderness approximately every other year since 1953.

### MARK YOUR CALENDAR

APRIL 10, 1965 - ANNUAL TRI-CHAPTER MEETING

Host Chapter: Columbus

Subject: Industrial Applications of Aerospace Programs  
10 a.m. - 8 p.m. including lunch, dinner, four speakers  
plus tour of North American

APRIL 8, 1965 - UC GRADUATE SEMINAR

Speaker: Dr. Stuart W. Churchill

Subject: The Minimum Description of a Boundary Value Problem

4:30 p.m. - Room 105 - Chemistry Building

MAY 11, 1965 - ANNUAL MEETING

Terrace Park Country Club

Line up your Golf Foursomes

MAY 13, 1965 - UC GRADUATE SEMINAR

Speaker: Dr. O. W. Nestor

Subject: Laser Concepts, Materials and Applications

\*Dinner—\$3.00 - Children \$2.00 - Optional-Reservations Required - CALL MR. LYNN ARNOLD (242-1111) BY MARCH 29, 1965.  
Please indicate choice of lobster tail or beef tenderloin.

\*\*Open to the public



When Glenn W. Gail served on the ASM Education Committee in 1959-62 he was appointed chairman of a subcommittee on scouting. Other members of the subcommittee were Paul Anderson, J. Edward Kraus, W. D. Manly, Maxwell Pever and Eric Wuchsmann. The task of this subcommittee was to advance the activities initiated by the scouting committee of the Philadelphia Chapter headed by Maxwell Pever on developing the requirements for a Merit Badge in Metallurgy for the Boy Scouts of America.

Glenn, a Past Chairman of the Washington, D. C., Chapter of ASM, has been an active participant of scouting since 1945. He is now serving as an institutional representative, chairman and treasurer of a boy scout troop committee, member of the Arlington District Organization and Extension Committee, and a merit badge counselor for metallurgy, metalworking and astronomy. He received the Silver Beaver Award in 1963 from The National Capital Area Council, BSA.

Since 1936, Glenn has been employed in the Metallurgy Division of the National Bureau of Standards, Washington, D. C. His major field of study has been the effects of temperature, both elevated and subzero, and multiaxial stress systems on the deformation and fracture of metals and alloys. He has been the author (or co-author) of over 35 technical publications. In 1957 the U. S. Department of Commerce bestowed upon him the Meritorious Service Award (Silver Medal) "for exceptional achievement in physical metallurgy, particularly in studies relating to the deformation of metals at subzero temperatures and for meritorious authorship."

## Boy Scouts of America Metallurgy Merit Badge

Glenn W. Gail  
advanced  
the concept of  
the Metallurgy  
Merit Badge  
through  
ASM Education  
Committee



## NOTES REVIEW



News  
Magazine

FEBRUARY 1965

## Career Issue

## Requirements for the Boy Scout Merit Badge in Metallurgy

Now that the Boy Scouts of America has instituted a new Merit Badge in Metallurgy, ASM chapters and members may want to sit at campfires to scouts who desire to earn this badge. There is a great deal of interest in this activity in many chapters. Several are already taking an active role.

The PHILADELPHIA CHAPTER, when the concept of the merit badge in metallurgy originated under Maxwell Pever, has been working toward this end for several years. Also, members whose sons are scouts would do well to encourage them to work toward earning this new badge.

Below are the requirements for the new Metallurgy Merit Badge as included in the Boy Scout Requirements 1963 booklet.

1. a. Name metals found by early man. Tell how they were discovered and how they were used.  
b. Collect five rocks that contain at least one metal each. Show them to your counselor and describe how the metal contained in them could be recovered.  
c. Collect samples of two kinds of metal ground into fine or coarse particles. Choose three of these and describe in 500 words how they are separated from their ores.
2. Name the different fields of metallurgy. Describe by your counselor what each field includes.
3. Choose three of the following fields that depend on modern metallurgy: Electronics, Aircraft Industry, Space Exploration, Automotive Industry, Building Construction. Bring to your counselor samples of metal used extensively in these three fields and tell what special property each has that makes it so valuable in its field.
4. a. Explain what your counselor shows of the following mechanical properties of metals: strength, elasticity, ductility, hardness, malleability. Use one of the materials listed for each demonstration: This Copper Wire

Solder or Lead  
Aluminum Foil  
A piece of steel  
Hack Saw Blade

5. Demonstrate: a. Strengthening of metals by working and by heat treatment (continual bending of wire to show its strength-holding hack saw blade to stress it; then releasing it to red heat and quenching in water to harden).
6. Describe the properties of each of these four alloys and tell what special property each has that makes it more desirable than the more basic metals.  
b. Magnetite  
c. Spinel  
d. Density  
e. Hardness  
f. Color  
g. Chemical
7. Construct out of suitable materials models of the following crystal structures found in metals:  
a. Body-centered cubic lattice  
b. Face-centered cubic lattice  
c. Close-packed hexagonal lattice. List two metals or alloys of each of the above crystal types.
8. a. Explain what is meant by corrosion and protective coatings.  
b. Into a glass of strong salt solution, place three pieces of iron that have been protected from corrosion by (1) galvanizing with zinc, (2) painting, and (3) tin plating. Make a single deep scratch on each piece that goes through the coating to the iron. After a few days, explain what has taken place.



A metallurgist at Battelle makes a study of chemical vapor deposition. The process is utilized in producing some high purity metals and in preparing coatings for nuclear particles.

## What It Takes To Be a Metallurgist and Engineer

By Kenneth B. Hobbs\*

OUR NATION NEEDS an ever-increasing number of competent metallurgical engineers and technicians. For those who qualify, there are rewarding careers in science and engineering. Although a sufficiently high intelligence quotient is required to insure success in science, more important are desire, attitude, and willingness to work.

Able engineering students are characterized by a multiple pattern of abilities, skills, and aptitudes. Several means must be employed to help identify these characteristics, such as the student's grade achievement or performance record through

the 12th grade; a continuous program of aptitude testing maintained by the school; and trained guidance counseling through the school.

These three general, basic means are necessary in the study and discovery of high scientific ability and for actually determining whether a student who possesses the abilities to choose science and engineering—and metallurgy in particular—as a career.

### Prerequisite Factors

There are at least four prerequisites which will influence the student whether or not to attempt a career in science or engineering. Generally stated, these are: above average intelligence (above IQ 110); the opportunity for development; personal attributes; intellectual curiosity; and financial means to pursue the required training.

### He Has a High IQ

The intelligence quotient is determined through a series of tests administered by the school. Parents and counselors should not rely solely on the results of a single test, but rather on the results from a number of such tests over a period of years. In some school systems the IQ test results are not always available to parents but are reserved for use by school personnel. Perhaps better still, the would-be engineer's ranking in the upper 1/4 or 1/2 of his class is a good indication of above-average achievement. Putting it another way,

he is rated "above average," "superior," or "gifted."

### He Works Diligently

Foremost among the personal attributes of the future metallurgist is an ardent and active willingness to work diligently and with persistence. He should develop characteristics of neatness and attention to detail as he matures—but willingness to work is all important.

### He Has Intellectual Curiosity

Intellectual curiosity is, perhaps, the most difficult characteristic to observe or to actually measure. The scientifically talented youngster is actively interested in and curious about the how and why of things. Often times he is not willing to accept a stock answer to a problem or situation he is attempting to solve.

### He Is an Avid Reader

His skill and interest in reading are above average. He reads a great deal, and he reads more mature books and articles than many of his classmates. Some schools can supply reading rates which will be most useful in determining the would-be engineer's reading speed.

### He Has Interest in Mathematics

His level of achievement in arithmetic is high. He has probably shown an early interest in numbers, calendars, clocks, thermometers, and similar articles. As early as the seventh grade there may have been signs

of a growing interest in mathematics or in various branches of science and engineering.

### Special Scientific Interest

The would-be engineer has a special scientific interest area—such as electronics, astronomy, wildlife, or of the physical and biological sciences in general.

After-school seminars, participation in Science Fairs, presentation of scientific research papers and projects—all form an important background of information and experience for the would-be engineer.

The would-be engineer shows originality and inventiveness in his thinking.

The scientifically talented student will generally fit into this pattern of over-all characteristics. It is important to parents of would-be engineers or metallurgists to identify those who will succeed as well as those who are less likely to succeed. The talented student is no exception to the principle that early recognition is important to success.

### He Should Be Articulate

A scientist or metallurgical engineer who cannot communicate effectively is virtually useless. Hence, four years of English is required preparatory for college training in engineering. Hopefully, the would-be metallurgist or engineer will learn to read, write, and speak correctly and well. This will be of great importance to him in his career.

The early years is not the age of specialization. It is not necessary—or even desirable—that the high school student of today decide on a specific branch of science or engineering.

neering prior to graduation. He need not feel that he must make up his mind right now as to whether he wants to be an atomic physicist, an entomologist, or a metallurgist.

If he voluntarily shows great interest and desire to work in a specific field, parents and counselors will not want to discourage him. However, he may not make up his mind—very few actually do—until he has been recommended courses for a career in science and engineering during his high school days, he will have no difficulty in moving toward a highly specialized field by the beginning of his second year in college.

### The Financial Problem

A recent study revealed that only 40% of the high school graduates who have the ability ever receive a college degree. Of the 60% who do not receive degrees, 20% drop out during college, and 40% never enter college at all. A large number of the 40% who do not enter college do so not because they lack the funds to see them through. Our study of 33,750 senior high school students revealed that among the top 20% (5000) almost half indicated that expense would be an important reason for not going to college.

The advice of college entrance people is that, if the would-be metallurgist or engineer needs financial assistance, he should exhaust all possibilities for scholarship, loan, fellowship, and grants before trying to work his way through college. If he must work, it is better that he work during the summer of his high school and college years or that he investigate the "cooperative"



Metallurgists at Battelle study graphitization of iron. In this study they employ a hot stage microscope with vacuum or controlled atmosphere at temperatures up to 2000 F.

plans operated in some colleges. He should be aware of his abilities, his teachers' observations—in fact, his entire school record—are all factors in the formula which enables parents and guidance counselors to recognize a budding metallurgist.

### Summary of Requirements

To summarize, the characteristics taken to be a metallurgist or an engineer are:

He will normally be in the upper third of his class academically.  
He reasons clearly and understands abstract ideas.  
He is interested in a wide range of subjects, although he may have one or two special interests.  
He learns rapidly and without a great deal of "drill."  
He understands and uses a large number of words.

He seldom knows "why," in addition to "what."  
He is alert and observant.  
He remembers quickly and easily.  
His span of attention is relatively long.

He exhibits an early observed facility for mathematics, and He possesses good physical and emotional health.

Here the metallurgist is making a study of the effect of hydrogen on the strength of metals. Tensile specimens, instrumented in an electrolyte, are charged with hydrogen while under tension.

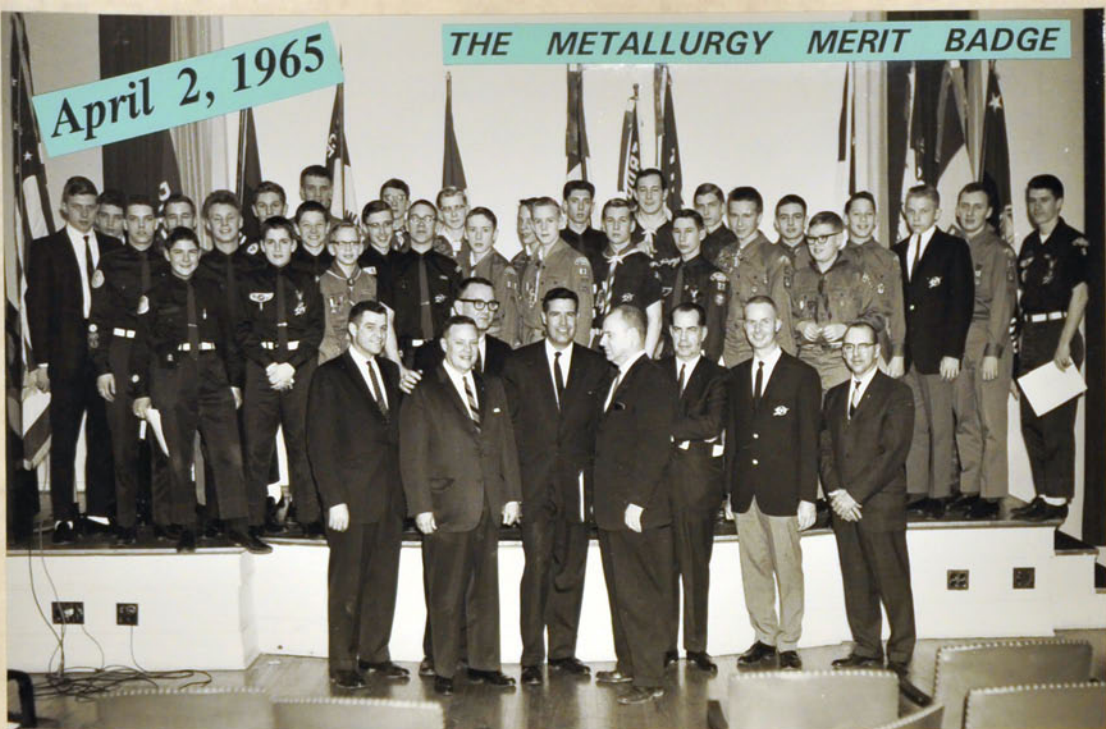


\*KENNETH B. HOBBS is senior executive research, metallurgical section, Battelle Research and Development Corporation, Columbus, Ohio. Mr. Hobbs received his B.S. degree from Case Western Reserve University and also completed graduate studies there. He has been a visiting lecturer, radio-visual education consultant, and college counselor; he has been a technical instructor in science, general science, and college-level science programs. A producer-director of elementary science programs, he has been a member of the National Science Foundation, the National Association of Science Teachers, and the American Society for Metals.



April 2, 1965

THE METALLURGY MERIT BADGE





# THE METALLURGY MERIT BADGE

FRED P. STROTHER, NATIONAL COUNCIL, BSA (in uniform), — proudly presents metallurgy merit badges to Tom Pence, Ken Husner, Dave Reed and Donn Storch. Ned Herrmann, Evendale's Manager — Employee and Community Relations is at left.

April 2, 1965

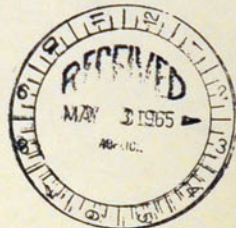




# THE METALLURGY MERIT BADGE

April 30, 1965

Dr. M. Eugene Merchant  
Director of Scientific Research  
The Cincinnati Milling Machine Co.  
Cincinnati, Ohio 45209



Dear Dr. Merchant:

My greetings to you across the years and miles between the Region 10 Cance Base and now. I can't remember for sure the other men who came those several years with you and your son Dave, but I will remember you. From the mention in your talk at the Metallurgy merit badge presentation, you are still at it.

Little did I know that you were a topflight scientist, and I am sure I did not look like an editor up on the edge of the wilderness. G. W. Pomeroy of General Electric sent me a copy of the complete text of your talk to the metallurgy group. I wanted it as a possible article for SCOUTING magazine.

Now that I have seen it, I want to share my reactions with you. It was a marvelous talk for the purpose. It must have been well-received by the merit badge winners and their friends and contained a real message. For the adult readers of SCOUTING magazine, we would have to cut out most of the metallurgy material and concentrate on your introductory points of doorways opened by Scouting and the merit badge program. We could, if any of my staff ever find time, excerpt that part of your talk, and I would be tempted to leave in Meadows, Horse, and Yum Yum Portages. (There was a folk-tale that several crews found Yum Yum Portage and came back, but I never knew for sure who it was till now.)

You have directed your remarks largely to the Scouts and Explorers. This would need to be directed to the adult readers of SCOUTING magazine. Now, the \$64,000 question—could you find the time in between your canoe trips to put together an article to include this outlook you have on Scouting and the merit badge program for an article for SCOUTING magazine. We believe it would be a better article that way, but you know the demands on your time better than we do.

When you write Dave again, greet him for me.

Sincerely yours,  
BOY SCOUTS OF AMERICA  
Education Division

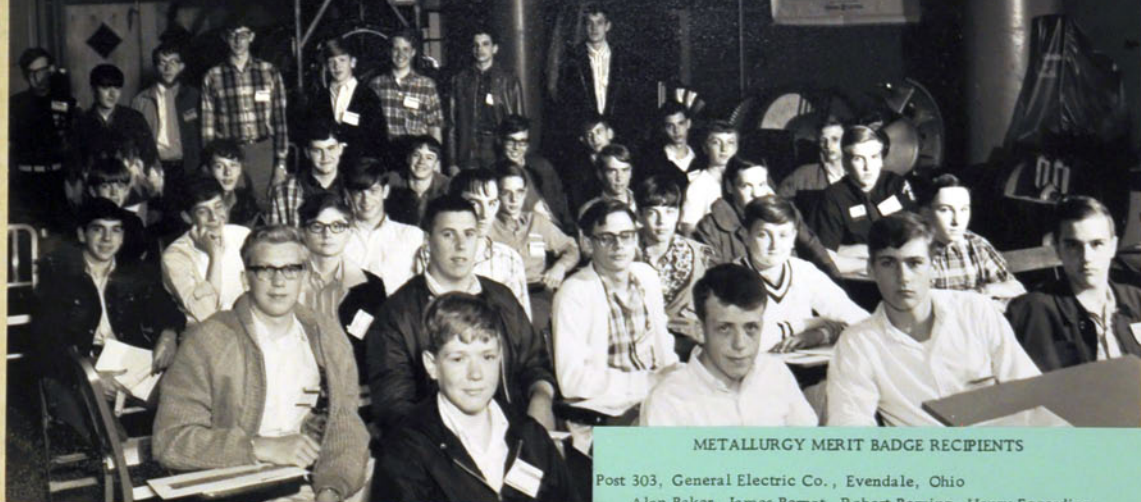
Oren R. Felton  
Managing Editor  
SCOUTING Magazine

ORF:gc  
cc: Mr. G. W. Pomeroy

*Thank you.  
Hope this  
will be  
fruit.  
O.R.F.*



# THE METALLURGY MERIT BADGE



BOY SCOUTS of AMERICA  
and  
AMERICAN SOCIETY for METALS  
Award

*First Metallurgy Merit Badge*  
to

Presented at  
The Engineering Society of Cincinnati  
April 2, 1965



Mr. Fred P. Strubbe  
National Council—Boy Scouts of America



Dr. Stuart Fletcher  
Vice President—American Society for Metals

## METALLURGY MERIT BADGE RECIPIENTS

- Post 303, General Electric Co., Evendale, Ohio  
Alan Baker, James Bernat, Robert Berning, Henry Eggerding,  
Richard Jordan, Frank Riggs, David Ringshauser, William Uffman
- Troop 290, St. James Church, Wyoming, Ohio  
Gregory Calkins, Roderick Calkins, Peter Joseph
- Troop 482, Friendship Methodist Church, Wyoming, Ohio  
Paul Pomeroy, Jon Sells
- Troop 544, Grace Lutheran Church, Cincinnati, Ohio  
William Ringshauser
- Troop 98, Montfort Heights Community Methodist Church, Montfort Hts. O.  
Duff Kindt, Gary Momberg
- Post 27, Assumption Church, Mt. Healthy, Ohio  
James Greis, Mike Harbison, Lawrence Hartmann, Thomas Russell
- Post 393, St. Margaret Mary Church, N. College Hill, O.  
James Hartke, David Weingartner
- Post 433, American Legion Post 531, Greenhills, O.  
Richard Burns, Kenneth Hauser, Thomas Pence, David Reed,  
Donn Storch
- Troop 270, Mt. Healthy Methodist Church, Mt. Healthy, O.  
Robert Rowlette
- Troop 433, Greenhills Kiwanis Club, Greenhills, O.  
Elliot Chase, Gary Green
- Troop 545, St. Paul United Church of Christ, N. College Hill, O.  
Kenneth Fallor, Fred Hertenstein, Robert Moody, Gary Stegman
- Troop 833, Greenhills Community Church, Greenhills, O.  
James McGhee, Mike Steele, Gary Uhlenbrock, Richard Uhlenbrock
- Troop 1, Steubenville Rotary Club, Steubenville, O.  
Ronald Baker, Joseph Bruzese, Robert Chuba, Douglas Curry,  
Jack Fournier, Craig Fraser, Jimmy Keenan, Richard Lashley,  
James Marbais, Richard Marbais, James Mavromatis,  
John Molesky, Gary Nichols, Danny Skipper, Barry Spencer,  
Eddie Spencer, Thomas Wilson, Robert Woods
- Troop 2, Blessed Sacrament Church, Steubenville, O.  
Gary Arend, James French, David Garvey, David Hogan,  
Robert Lanscult, David Schulte, Gerald Schulte
- Troop 86, Brentwood Methodist Church, Steubenville, O.  
Robert Caputo, James Evans, George King, Robert Mottice,  
Frank Ross, Barry Ross, Robert Walter, Douglas Walter
- Troop 448, St. Martin's Episcopal Church, Chagrin Falls, Ohio  
Tom Gerken, Ted Lewtas



# THE METALLURGY MERIT BADGE

203 Sleepy Hollow Court  
Seabrook, Texas  
March 2, 1965

Mr. George W. Pomeroy  
General Electric Company  
Nuclear Materials & Propulsion Operations  
P. O. Box 15132  
Cincinnati, Ohio 45215

Dear Mr. Pomeroy:

I have just talked with my secretary in Fort Lauderdale and she informed me of Mr. Fellows' kind invitation to participate in the Merit Badge Awards Program in Cincinnati on April 2, 1965.

I appreciate your consideration in this regard and regret very much that I am not able to accept. There are several areas in which I find it necessary to divide my time these days, and I am sorry I am not able to accept all the kind invitations offered by worthy organizations such as this one.

I am again working with the space program as a consultant to the National Aeronautics and Space Administration and taking part in other activities with organizations such as the Boy Scouts and Freedoms Foundation, as well as being on the Board of Directors of Royal Crown Cola Co. However, since we have received so many invitations from various Boy Scout Movements throughout the country, we have found it necessary to work with them more or less on a national scale.

Please express my regrets to Mr. Fellows, for I sincerely appreciate his invitation. I wish you the best of luck with this year's program and please express my best wishes to the participants.

Sincerely yours,

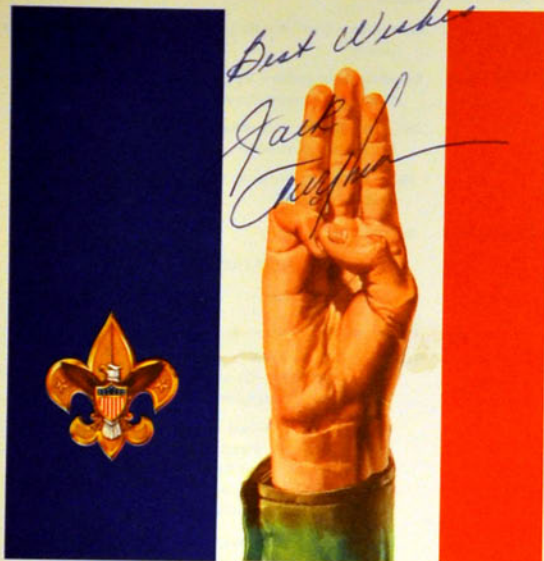
*Nancy C. Glenn*  
for John H. Glenn, Jr.  
Colonel, USMC (Ret.)  
NASA Astronaut



Dictated by telephone by  
Colonel Glenn and signed  
in his absence.



# STRENGTHEN AMERICA



## SCOUTING CAN MAKE THE DIFFERENCE

BOY SCOUTS OF AMERICA AWARDS PROGRAM  
FIRST PRESENTATION OF METALLURGY MERIT BADGE

APRIL 2, 1965  
CINCINNATI, OHIO

### JACK TWYMAN

Member

Ted Williams Sports Advisory Staff

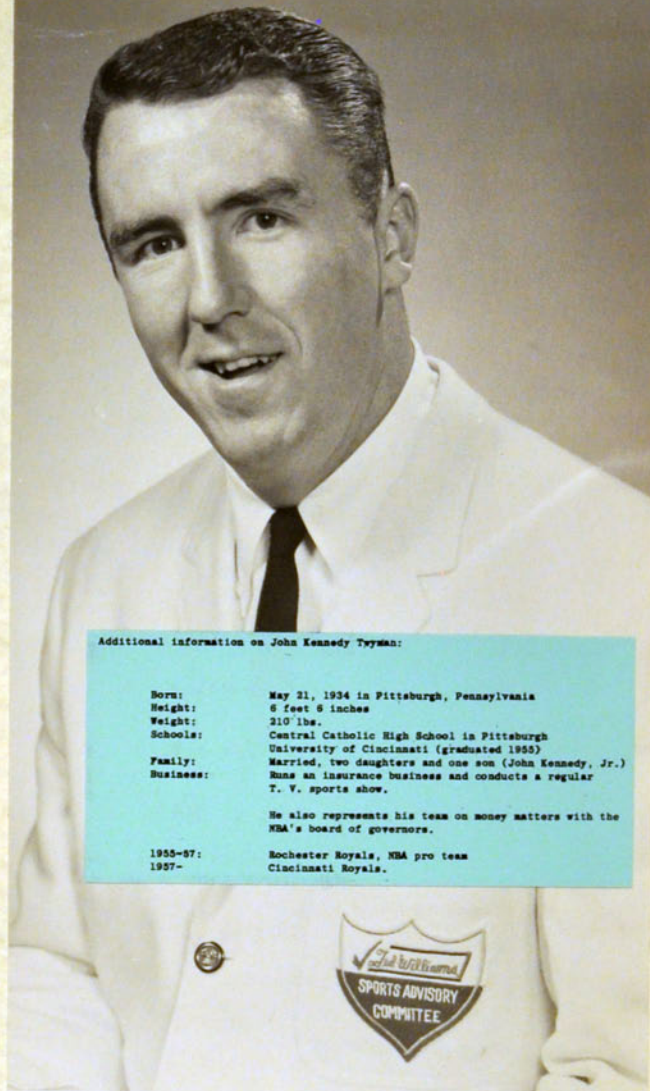
Jack Twyman of the Cincinnati Royals is in his 8th season with the National Basketball Association. For eight years in a row he has been one of pro basketball's star players and top scorers. He is the oldest Royals' veteran in point of service and the only member of the original Rochester team still with the club.

At 6 feet 6 inches, he is not considered tall as pro basketball players go, but he makes up for his height with deadly accuracy from the corners and far out. He has two excellent soft shots, a one-hand jumper and two-handed set. Boston Celtic Coach Red Auerbach discussing his one hand jump shot said, "show him a little daylight and boom — it's up and in."

Twyman has a career average of 22.1 points over a span of seven seasons and 523 pro games. Last year he was runner-up to Wilt Chamberlain as the NBA field goal percentage leader, hitting 49 per cent of his shots and was the fifth highest scorer in the league. The two previous years he was runner-up to Bob Pettit and Chamberlain as the top scorer. His 2,338 points in 1959-60 was the most he has scored in a season. His top single game output as a pro was a 59-point total against the Lakers in January, 1960. He made the All-NBA second team in 1959-60.

He has played in six NBA All-Star Games and compiled a 15.2 average, and holds the best field goal percentage record.

On November 16, 1961, in a game against Boston, he scored 29 points putting him over the 10,000 mark as a pro.



### Additional information on John Kennedy Twyman:

Born:	May 21, 1934 in Pittsburgh, Pennsylvania
Height:	6 feet 6 inches
Weight:	210 lbs.
Schools:	Central Catholic High School in Pittsburgh University of Cincinnati (graduated 1955)
Family:	Married, two daughters and one son (John Kennedy, Jr.)
Business:	Runs an insurance business and conducts a regular T. V. sports show.

He also represents his team on money matters with the NBA's board of governors.

1955-57:	Rochester Royals, NBA pro team
1957-	Cincinnati Royals.

### JACK TWYMAN

Ted Williams Sports Advisory Staff

- 2 -

Jack Twyman never picked up a basketball until he entered Pittsburgh's Central Catholic High School as a freshman. He came into his own in his senior year, playing both as a forward or center and averaged 20 points. Freshmen were eligible to play varsity ball when Twyman entered the University of Cincinnati and he made the team though seldom played. Due to his awkwardness he was nicknamed "Footsie." He got consistently better, averaging 15.1 points a game as a sophomore, 21.8 as a junior and 24.6 as a senior. His last year he was the 14th highest scorer in major college basketball.

Aside from being a great basketball player, Jack Twyman is a great individual. His selfless devotion to his teammate, Maurice Stokes, is well-known. On January 30, 1962, the Philadelphia Sports Writers Association cited Stokes and Twyman as the most courageous athletes of 1961.

Since March 15, 1956, when Stokes was stricken by a paralyzing brain disease, Twyman has dedicated himself to Maurice's rehabilitation. He had himself appointed Stokes' legal guardian, has raised thousands of dollars to pay for the costly care Stokes has required and has been continually at his side. Twyman is in every sense of the word a sportsman.



In 1965 the Space Exploration Merit Badge Program was undertaken by the Post. The program again consisted of lectures by qualified scientists in the Space field of science as well as movie and slide demonstrations, together with tours of some of the facilities of the Space Power and Propulsion Section. The first Space Exploration Merit Badges in the Cincinnati area were awarded in the Spring of 1966.

## COMMITTEE ROSTER

[illegible]

## SCOUT ROSTER

[illegible]





# SPACE EXPLORATION 1964 PAMPHLET

1. Present a report in at least 500 words, describing the history and development of space exploration.

2. Do the following:

(a) Identify from illustrations or models five U.S. space launch vehicles and seven U.S. unmanned spacecraft.

(b) Describe the purpose of two U.S. space probes and two satellites, giving the main types of instruments involved.

(c) Identify and describe the missions of at least three U.S. manned spacecraft.

3. Assume you are an astronaut in a spacecraft. Explain briefly in writing problems and how they may be solved, related to five of the following: radiation, meteoroids, weightlessness, diet, sanitation, clothing, acceleration, deceleration, reentry, breathing, and communication.

4. Draw plans for and construct a nonfiring model of a space launch vehicle. Using this model, describe how it operates to place a spacecraft in orbit, and how a space probe might be launched from such spacecraft. Explain how a satellite remains in orbit.

5. Do ONE of the following three projects:

(a) Describe a series of six conditioning exercises that you might use to prepare yourself for space exploration, explaining their purpose.

cc: E. C. Foster  
G. W. Pomeroy  
R. C. Rau  
W. F. Zimmerman  
T. L. Ellis  
G. L. Wesling  
E. T. Berning  
M. L. Frost, Jr.  
R. M. Brooks  
D. S. Engleby  
F. W. Tippets  
R. N. Edwards  
N. P. Jeffries

With the close of the scouting activities for the year, I would like to thank each of you for your help in the planning and implementation of the program leading to the Space Exploration merit badge and for your support in the other activities undertaken by Post 303. On Wednesday, May 23, at a recognition dinner 36 boys received their merit badges. Your efforts in helping accomplish this objective are appreciated.

H. L. Nichols, Advisor Post 303

HEN/dc



618595  
18595  
SPACE EXPLORA  
618595

August 12, 1966

Mr. M. A. Zipkin, Manager  
Space Power & Propulsion Section

This letter is written in behalf of the General Electric Explorer Scout Committee to thank you for a very excellent program on space and space propulsion during the past year. The General Electric Company, through the Space Power & Propulsion Section's effort on this program, has made a significant contribution to education and knowledge of the youth of our community.

As you may know, the Space Exploration Merit Badge was used as a guide with considerable additional material presented to provide a well rounded course. When fully developed, it could have been equivalent to a first year college course in space technology. One Scout's reaction was "Gee, I didn't realize that space exploration could be so interesting and so complicated."

The interest quality of the program was affirmed by the high attendance at the meetings and the fact that 36 boys completed the ten month program and received the Space Exploration Merit Badge. Mr. H. L. Nichols of your staff is to be particularly commended for the extended time and complete dedication he applied to make the General Electric Post year an outstanding success.

Very truly yours,

G. W. Pomeroy, Chairman  
Post 303 Committee

ds



A bonus was a trip to the Kennedy Space Center in Florida.



# GE AIRCRAFT ENGINE

GENERAL ELECTRIC

EVENDALE PLANT  
CINCINNATI, OHIO, 45215

SUBJECT  
Explorer Scout Post

August 10, 1966

I. H. Anderson, Acting Manager  
Employee Relations - Engineering  
& Projects - Evendale

Reference our meeting this morning with Mr. George Pomeroy, Nuclear Materials and Propulsion Operation, concerning the Explorer Scout Post which is sponsored by G. E. Evendale. It is requested that Engineering, PFED, take the initiative in providing leadership for this Explorer Scout Post for the next two years.

First of all, a Post Advisor is needed. The Post Advisor should be someone who is interested in boys and who has the know-how to coach them in the jet engine field. This man would be in charge of the Scout meetings which are generally held two times a month. This past year the Scout meetings were held in the Building 701 lobby from 7 to 9 P.M. on the first and third Wednesday of each month. The Post Advisor, along with the Scout Committee, would plan and execute the programs for each meeting. In the case of the committee of five to ten men is needed. Their job would be to assist the Post Advisor in planning and carrying out the individual meetings and program. It would be well if the committee members themselves could have diversified experience in different areas so they could teach the boys various phases of jet engine technology. Other specialties that come to mind which might be would see fit. Some of the specialties that come to mind which might be represented on the committee are as follows:

1. Basic Engine Design
2. Controls and Accessories Design
3. Engine Installations (physical)
4. Engine Assembly and Testing
5. Performance Analysis
6. Installation Aerodynamics
7. Internal Engine Aerodynamics
8. Manufacturing and Manufacturing Engineering

As we discussed, there are about 50 boys in this Post who are in the 15 to 18 year old bracket. A lot of these boys are Eagle Scouts and are eager now to explore in the Jet Engine field. Last year they learned about Space Technology

MAIL DROP K79  
DIAL COMB # 332 4915

COPIES: W. Berliner  
E.C. Foster  
G.W. Pomeroy  
J.J. Wendelken



GENERAL ELECTRIC

EVENDALE PLANT  
CINCINNATI, OHIO, 45215

SUBJECT

I. H. Anderson  
August 10, 1966  
Page -2-

MAIL DROP  
DIAL COMB # 332  
COPIES:

from men associated, for the most part, with Mr. N. A. Zipkin's organization. The two years prior to that the boys learned about Metallurgy and Nuclear Energy from NCO's. The boys themselves have expressed a keen interest in Jet Engines and would welcome this program. Mr. George Pomeroy, who is now on the committee and has been for several years, is willing to continue to serve as a member and to guide and counsel as needed.

I would like for you to do some ground work during the next two weeks, while Mr. Pomeroy is on vacation, in terms of thinking of men who would be interested in this reorganizing work. When Mr. Pomeroy returns from his vacation August 29, get his concurrence with this activity. I met with Mr. R. H. Peak Jr., Manager of Public Affairs on 8/5/66, and he assured me that funds are available for the Boy Scout program for this coming year, and that they favored continuation of this activity.

Mr. E. Foster is Scouting Institutional Representative for the Evendale Plant and he will work closely with the committee, according to Mr. Pomeroy, in terms of lining up facilities and equipment that may be needed. A meeting to take advantage of some of the jet engine training films, manuals, etc. Provided by Education and Training.

One reason for recommending two years of activity is that the first year of activity could be carried on within the framework of the existing Aviation Merit Badge. It is recommended that a Turbo Machinery Merit Badge Program be identified and approval obtained during this first year and then this merit badge program carried out during the second year. Mr. Pomeroy, who is pushing for this, is well versed in what is required to initiate a new merit badge program having been a party to the creation of the Metallurgy Merit Badge used for the first time in 1964.

As a member of the Valley District Boy Scout Organizational Committee, I will be happy to help in any way I can in the reorganization phase of the Explorer Post.

B. C. Tatem  
B. C. Tatem, Manager  
J93 Systems & Performance  
J93 Engineering

mek

GENERAL ELECTRIC

FLIGHT PROPULSION DIVISION  
CINCINNATI, OHIO 45215

SUBJECT  
EXPLORER SCOUT COMMITTEE MEETING 3/21/67

March 22, 1967

Messrs: E. T. Berning  
F. E. Eglian  
R. J. Gerardi  
D. L. Harshman  
L. Kapor  
G. W. Pomeroy  
R. C. Rau  
J. P. Scheuer  
B. E. Sells

For the meeting on 3/21/67 the following committee members were present; B. Sells, L. Kapor, E. Eglian, E. Berning, G. Pomeroy (part time) and J. Vdoviak. The following major items were discussed and agreed upon.

- (1) Contacts with several school counselors has revealed that preliminary selection of prospective boys by 3/22 is unrealistic due to the spring vacations. The committee decided to reschedule the kickoff meeting from 3/30 to 4/6.

- (2) The tentative program schedule and major content was discussed with the following general plan:

- April 6 - Kickoff Meeting
- April 12 - GE Plant Tour (broad coverage all phases) *Ge*
- April 26 - (a) Orientation/Lecture - GE Service School Basic Engine
- (b) Tour - Engine Test Cell
- May 6 - Field Trip (refer to item 3) *FIRM*
- May 10 - (a) Orientation/Lecture - Engine Design
- (b) Tour - Engine Parts Manufacturing Area
- May 20 - Field Trip
- May 24 - (a) Orientation/Lecture - Testing
- (b) Tour - Engine Assembly

/Jag

GENERAL ELECTRIC

FLIGHT PROPULSION DIVISION  
CINCINNATI, OHIO 45215

SUBJECT  
EXPLORER SCOUT COMMITTEE MEETING 3/21/67  
March 22, 1967  
Page -2-

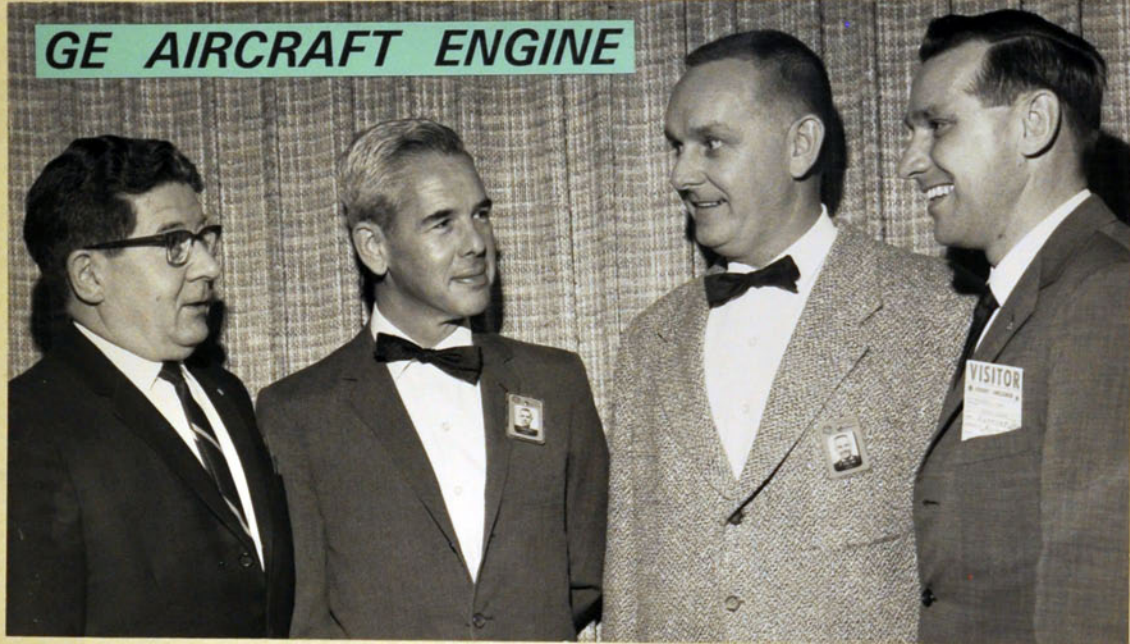
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DIAL COMB # 332  
COPIES:

- (3) The Field Trip possibilities and assignments for investigation are:
  - (a) GE Proving Ground Peebles - (this to be combined outdoor test observation and overnight) - J. W. Vdoviak
  - (b) NAA Plant - Columbus (A-5 airplane or other airplane manufacturing) - L. Kapor
  - (c) Wright Field - B. Sells
  - (d) Cincinnati Airport - E. Berning
- (4) Due to the short remaining time period (from April through May) it was decided that the initial program be aimed at an orientation/preparation for a full program starting in the fall. It was also concluded that the conduct of extensive activities through the summer was not desirable.
- E. Eglian will investigate a weekend during the summer with an armed forces reserve unit, (in Kentucky). This would be considered as an optional activity.
- (5) It was agreed that the Tuesday (5:00 to 7:00) PM committee meeting time be retained. The next meeting will be on 3/28 in the same location.

J. W. Vdoviak  
Committee Chairman



# GE AIRCRAFT ENGINE



## 1968 POST 303 CHARTER

### COMMITTEE ROSTER

POST 303  
11/30/68

INSTITUTION, ORGANIZATION OR GROUP OF OFFICERS APPLYING FOR CHARTER (Check one):  
☒ GENERAL ELECTRIC COMPANY  
 ADDRESS: 11131 EMBASSY DR. CINCINNATI, OHIO 45241  
 EXECUTIVE OFFICER: FREDERICK W. GABRY  
 ADDRESS: P.O. BOX 196 CINCINNATI, OHIO 45215

PLEASE CHECK IF APPLICABLE:  
☐ Previously hand-dropped  
☐ Monthly hand-dropped

PLEASE TYPE - BE SURE NAMES ARE CLEAR

First Name	Last Name	City	State	ZIP Code	Telephone	SA	CA	AS	PS	TS
TR	EVERETT C. PORTER	6848 STOLL LAKE	CINCINNATI, OHIO	45235	891-7517					
CC	J.W. VIOVILL*	608 BERNARD DR.	"	45231	263-9225	YES	CS	D	PS	
MC	GEORGE W. POMEROY	820 CODY PASS	"	45215	263-9225					
MC	D. E. HANSMANN	11131 EMBASSY DR.	"	45241	263-9225					
MC	B.E. SMITH*	1235 FOREST CT.	"	45215	263-9225					
DA	F. E. BELLAN*	622 E. FT. THOMAS PI. THOMAS, OHIO		45215	263-9225	YES	CS	D	PS	
AA	J. P. SCHREINER*	775 FLEMING RD. CINCINNATI, OHIO		45215	263-9225					

### SCOUT ROSTER

POST 303  
11/30/68

PLEASE TYPE - BE SURE NAMES ARE CLEAR

First Name	Last Name	City	State	ZIP Code	Telephone	SA	CA	AS	PS	TS
1	VALDIVIA	AMERSON	STAGY OF E.D. JENNINGS							
2	JOHN	BOHLEN	AMERSON							
3	JOHN	BOHLEN	AMERSON							
4	JAMES	BOHLEN	AMERSON							
5	ANDREW	BOHLEN	AMERSON							
6	JAMES	BOHLEN	AMERSON							
7	JOHN	BOHLEN	AMERSON							
8	JOHN	BOHLEN	AMERSON							
9	JOHN	BOHLEN	AMERSON							
10	JOHN	BOHLEN	AMERSON							
11	JOHN	BOHLEN	AMERSON							
12	JOHN	BOHLEN	AMERSON							
13	JOHN	BOHLEN	AMERSON							
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27	JOHN	BOHLEN	AMERSON							
28	JOHN	BOHLEN	AMERSON							
29	JOHN	BOHLEN	AMERSON							
30	JOHN	BOHLEN	AMERSON							





Following the program on Space Exploration, the scientific emphasis shifted to the field of jet engines. The program consisted of an orientation, a series of lectures and discussions to familiarize the members with some aspects of jet engines and concepts of flight propulsion. The scouts were provided the opportunity to participate in experimental areas that included wind tunnel tests, aerodynamic design and features required for flight propulsion, as well as component and engine testing.





February 7, 1968

Mr. Lou Cheek  
C-2

With the concurrence of W. Killough, I have completed arrangements for the Company to join with A.E.C. and the new Cincinnati Science Center to make available a Merit Badge in Atomic Energy for a large number of area boys.

General Electric N.E.P.D. personnel involved include R. Rau, G. Pomeroy and Dr. K. Keys who has been nominated by the Company to serve as a White House Fellow. Principal lecturer for the program will be John Volz of the A.E.C. The theater and work rooms of the new Science Center have been made available through the cooperation of G. Porter and R. Knutson, director and assistant director.

This, I feel, provides us with another opportunity to encourage high school students to pursue a career in the sciences. In addition, it provides an opportunity for the Company to cooperate at little cost with the other agencies involved.

This new program is in addition to the very successful Merit Badge program in Gas Turbines with which our Evendale Plant Explorer Post #303 is now involved. Leaders for this program include E. Eglian, J. Scheuer, B. Sells, J. Vdovak and others in the Aircraft Technical Division.

At my invitation, Gene Lang attended yesterday's organization meeting and has agreed to work with Tom Bender to insure that we receive proper credit for our co-sponsorship.

Details of this new program are indicated on the enclosed attachments. Incidentally, my role in these programs, in Boy Scout terms, is that of Institutional Representative.

*E. C. Foster*  
E. C. Foster, Manager  
Employee Activities & Liaison

12-F THE CINCINNATI ENQUIRER



By George Hahn

## Unique Merit Badge Offered Scouts

An opportunity for Boy Scouts and Explorers to obtain a unique merit badge will be offered beginning Tuesday at the new Cincinnati Science Center at Union Terminal.

A five-week Atomic Energy Merit Badge program will be offered from 7:30 to 9 p.m. each Tuesday through March 12. The program is free to all Boy Scouts and Explorers. The program will be co-ordinated by Dr. L. K. Keys, of the General Electric Co.

NUCLEAR materials and propulsion operation of the GE Co. will be demonstrated by John Volz, during the five week program. Volz, a lecturer from the Oak Ridge Associated Universities, is a former high school teacher and holds a master of Science degree from Kent State University.

Boy Scouts and Explorers wishing more information about the free merit badge program may call MARCUS L. McDONALD, Dan Beard Council, Boy Scouts of America, at 961-2336.

The five-week program will be conducted in cooperation with the GE Co., Dan Beard Council, Science Center, Oak Ridge Associated Universities and the Atomic Energy Commission.

Page 4

February 9, 1968

## Plant Cooperates in Developing Atomic Energy Course for Scouts

General Electric-Evendale is cooperating with the Atomic Energy Commission and the Cincinnati Science Center to make available to the Dan Beard Council, Boy Scouts of America, an Atomic Energy Merit Badge Course for all qualified Scouts and Explorers in the area. This will be an accelerated course conducted on five consecutive Tuesday evenings at 7:30 p.m. beginning on Tuesday, February 13. The Courses will be held at the Cincinnati Science Center in the Union Terminal on Lincoln Park Drive.

The course will be presented by John Volz, exhibit manager for Ohio for the Oak Ridge Associated Universities. It is being coordinated by Dr. Kenneth Keys of NMPD and George Pomeroy, neighborhood commissioner for the Boy Scouts and chief counselor for the Atomic Energy Merit Badge program. Robert Rau, who conducted an Atomic Energy Merit Badge program for Explorer Post 303, sponsored by the Evendale Plant, a few years ago, is also assisting in course arrangements.

Members of Post 303 who have not already earned the badge are welcome to participate, but are not expected to dominate the program. Under Advisors Elmer Eglian, John Scheuer, Bert Sells and J. Vdovak, Post 303 is already engaged in a gas turbine project this year.

The Atomic Energy Course is being offered at this time primarily because the availability of Mr. Volz, himself an Eagle Scout, makes it possible to offer this badge an unusual opportunity to do so in a concentrated five-week course.

Interested Scouts are invited to be on hand at the Science Center next Tuesday at 7:30 p.m. All sessions are scheduled for one and one-half hours.

## THE INVITATIONS

WHAT?

Atomic Energy Merit Badge Course conducted in cooperation with the Atomic Energy Commission, the Cincinnati Science Center, and General Electric.

WHEN?

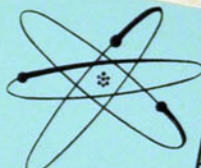
February 13th, 20th, 27th  
March 5th, 12th  
Five great weeks, conducted by top experts. All sessions will start at 7:30 P.M. - 9:00 P.M.

WHERE?

Cincinnati Science Center in the Union Terminal on Lincoln Park Drive.  
Any Boy Scout or Explorer interested in earning the Atomic Energy Merit Badge.

WHO?

Notify every boy you can now. Time is short.



# ATOMIC ENERGY



# ATOMIC ENERGY MERIT BADGE PROGRAM



## *An Overwhelming Response*





## GE Helps 450 Scouts Earn Merit Badges Through Accelerated Program

General Electric people played an important part in setting up a program which enabled more than 450 Boy Scouts to earn Atomic Energy Merit Badges at an awards program last Friday at Princeton High School.

General Electric cooperated with the Atomic Energy Commission, the Cincinnati Science Center and Oak Ridge Associated Universities to develop the program for Dan Beard Council, Boy Scouts of America.

The awards program climaxed one of the most successful merit badge programs ever conducted in the Dan Beard Council. Organized quickly to adapt to the crowded schedule of John Voltz, exhibit manager for Oak Ridge Associated Universities, who instructed the sessions, the program was conducted on an accelerated basis. Six successive Tuesday night sessions were held, beginning February 13, at the Cincinnati Science Center quarters in the Union Terminal. More than 600 Scouts registered for the program, and a remarkably high percentage completed it successfully.

Key roles in organizing the program were played by three men from the Nuclear Systems Programs at GE-Evendale. They were: Dr. L. Kenneth Keys, program coordinator; George Pomeroy, administrative advisor, and Robert Rau, science advisor. Together with Marcus McDonald, of the Dan Beard Council, and Robert Knutson, Cincinnati Science Center, they worked with

Mr. Voltz in establishing the program and carrying it out.

At Friday's program, at which George M. Hunsinger, manager of Employee Relations for NSP was the master of ceremonies, each of these men was recognized for the part he played in the program.

Brief remarks were made by A. J. Marini, manager, Management Personnel Practices, representing AEG-Evendale; Clarence L. Karl, manager, AEC Cincinnati Area Office; Wallace W.

Hill, industrial relations director, BSA; Basil F. Starkey, Scout executive, Dan Beard Council, and Charles Westheimer, president, Board of Trustees, Cincinnati Science Center.

Courtland Randall, chairman, Information and Exhibit Division, Oak Ridge Associated Universities delivered the principal address, "Your Career and Atomic Energy."

Atomic Energy Merit Badges were presented to the recipients by Lawrence Lewis, president, Dan Beard Council, and the accompanying certificates by Dr. D. J. Ahman, manager of Materials Science and Technology, Nuclear Systems Programs.



SEA OF SCOUTS is typical of the scene at the Cincinnati Science Center where merit badge lectures were given.



PRINCIPAL ROLES in staging the program were played by (l-r): George Pomeroy, administrative advisor; Dr. L. K. Keys, coordinator; John Voltz, lecturer, and Robert Rau, science advisor.



SCOUT EXECUTIVE Basil F. Starkey congratulates boys who successfully completed the merit badge program.



MOUSE TRAPS and Ping Pong balls are used by John Voltz to demonstrate principle of chain reaction.



SONS OF EVENDALE employees who earned merit badges pose with their advisors.



# FINAL EXAMINATION FOR THE ATOMIC ENERGY MERIT BADGE

Try It & See What You Can Do!  
Only 8 Scouts In 450 Made A Perfect Score  
(The answers are on the following page)

## FINAL ATOMIC ENERGY MERIT BADGE EXAM Tuesday, March 12, 1968

Name \_\_\_\_\_ Age \_\_\_\_\_  
School \_\_\_\_\_ Grade \_\_\_\_\_  
Scout Master \_\_\_\_\_ Troop \_\_\_\_\_  
Rank \_\_\_\_\_

Has your scout master attended any of these meetings?

Yes ☐ No ☐

- What are the colors of the radiation symbol? Check two.  
A. Red or Magenta  
B. Black  
C. Blue  
D. Yellow
- The standard radiation symbol may be used to identify  
A. a storage area or a container for radioactive material  
B. radiation hazards  
C. both of the above  
D. none of the above
- An alpha particle is made of  
A. 2 protons and 2 neutrons  
B. 1 proton and 3 neutrons  
C. 1 neutron and 3 protons  
D. 2 protons, 2 neutrons and 2 electrons
- An atom is composed of  
A. protons  
B. neutrons  
C. protons and neutrons  
D. protons, neutrons and electrons
- The nucleus of most atoms is made of  
A. protons  
B. electrons  
C. protons and neutrons  
D. neutrons
- Background radiation may come from:  
A. cosmic rays  
B. radioactive material in water or air  
C. stars  
D. all of the above
- A beta particle is  
A. a negatively charged particle  
B. a positively charged particle  
C. a non-charged particle  
D. none of these
- A dosimeter is a device to measure exposure to radiation.  
A. True  
B. False
- Fallout is radioactive debris from the atmosphere.  
A. True  
B. False
- Fission is the splitting of the nuclei of some heavy atoms when hit by neutrons.  
A. True  
B. False
- Fusion is the joining together of two light nuclei to form a third nucleus plus energy.  
A. True  
B. False
- A gamma ray is one of the basic types of nuclear radiation.  
A. True  
B. False
- After one half-life of a radioactive material, 75 percent of the original radioactive atoms will remain.  
A. True  
B. False
- Ionization is a process whereby an atom may lose an electron.  
A. True  
B. False
- An isotope of an element will have the same atomic number as the element but a different atomic mass.  
A. True  
B. False
- Neutron activation is the process in which a neutron is absorbed by a nucleus making it unstable or radioactive.  
A. True  
B. False
- A nuclear reactor is a nuclear or atomic furnace.  
A. True  
B. False
- A Van De Graaff accelerator may be used as a particle accelerator.  
A. True  
B. False
- X-rays are not a form of radiation.  
A. True  
B. False
- Radioactivity refers to  
A. an unstable radio  
B. the ability of a nucleus to give off alpha particles, beta particles, and/or gamma rays  
C. both of the above  
D. none of the above
- A unit of measurement of radiation exposure named after Wilhelm Conrad Roentgen is called the roentgen.  
A. True  
B. False
- An X-ray is produced when a high speed electron hits a metal target.  
A. True  
B. False
- E = mc<sup>2</sup> made famous by  
A. Roentgen  
B. Rutherford  
C. Einstein  
D. Rahn
- Discovered radioactivity  
A. Rahn  
B. Curie  
C. Rutherford  
D. Becquerel
- Isolated radium from uranium ore.  
A. Curie  
B. Bohr  
C. Penning  
D. Fermi
- Discovered fission and chain reactor processes in uranium.  
A. Rahn  
B. Weizner  
C. Fermi  
D. All of the above
- Inventor of the Cyclotron (particle accelerator).  
A. Rahn  
B. D.C.  
C. Lawrence  
D. none of the above
- Electrons revolve around the nucleus like planets around the sun.  
A. Curie  
B. Yogi Berra  
C. Roentgen  
D. Bohr
- Discovered alpha particles.  
A. Rutherford  
B. Planck  
C. Donald Duck  
D. Bohr
- Discovered X-rays.  
A. Edison  
B. Roentgen  
C. Einstein  
D. Becquerel
- Atomic weight (Mass) refers to  
A. the number of atoms  
B. the number of protons and neutrons  
C. the number of electrons  
D. the number of protons
- There are about 103 elements. Each time we add 1 proton, we  
A. increase the atomic number  
B. increase the atomic weight  
C. both A and B  
D. none of the above
- The uranium in a reactor would be found in  
A. the dome  
B. the fuel element  
C. biological shield  
D. the control rods
- Regulates the rate of fission in a reactor core  
A. control rods  
B. shield  
C. fuel element  
D. turbine
- This merit badge is all about  
A. fun and games  
B. mouse traps and ping-pong balls  
C. hair standing on end  
D. energy
- A good reactor shield material would be  
A. wood  
B. concrete  
C. air  
D. jello
- A critical mass is  
A. the number of radioactive atoms necessary to keep a chain reaction going  
B. the maximum mass one can carry  
C. too many boy scouts to fit the auditorium  
D. none of the above
- Tritium, an isotope of hydrogen, has  
A. one proton  
B. two neutrons  
C. one electron  
D. all of the above
- A significant dose of gamma irradiation to seeds  
A. causes a noticeable change in growth  
B. causes no change in growth  
C. prevents growth  
D. makes seeds radioactive
- A geiger counter  
A. counts electrons  
B. detects alpha, beta, or gamma radiation  
C. controls a nuclear reactor  
D. is hard to start on cold mornings



FINAL ATOMIC ENERGY MERIT BADGE EXAM  
Tuesday, March 12, 1968

Name \_\_\_\_\_ Age \_\_\_\_\_  
School \_\_\_\_\_ Grade \_\_\_\_\_  
Scout Master \_\_\_\_\_ Troop \_\_\_\_\_ Rank \_\_\_\_\_  
Has your Scout Master attended any of the meetings? ☐ yes ☐ no

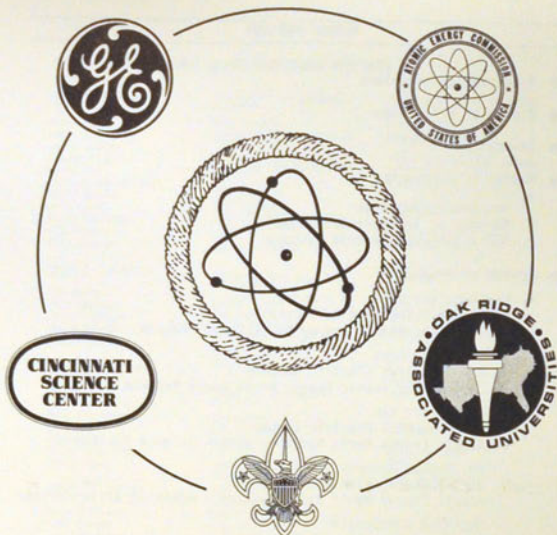
Fill in the appropriate circle. Exp: The Savannah is a nuclear powered:

- A. Truck C. Airplane  
B. Ship D. Tank

The correct answer is:

(A) (B) (C) (D)

- |                     |                     |
|---------------------|---------------------|
| 1. (A) (B) (C) (D)  | 21. (A) (B) (C) (D) |
| 2. (A) (B) (C) (D)  | 22. (A) (B) (C) (D) |
| 3. (A) (B) (C) (D)  | 23. (A) (B) (C) (D) |
| 4. (A) (B) (C) (D)  | 24. (A) (B) (C) (D) |
| 5. (A) (B) (C) (D)  | 25. (A) (B) (C) (D) |
| 6. (A) (B) (C) (D)  | 26. (A) (B) (C) (D) |
| 7. (A) (B) (C) (D)  | 27. (A) (B) (C) (D) |
| 8. (A) (B) (C) (D)  | 28. (A) (B) (C) (D) |
| 9. (A) (B) (C) (D)  | 29. (A) (B) (C) (D) |
| 10. (A) (B) (C) (D) | 30. (A) (B) (C) (D) |
| 11. (A) (B) (C) (D) | 31. (A) (B) (C) (D) |
| 12. (A) (B) (C) (D) | 32. (A) (B) (C) (D) |
| 13. (A) (B) (C) (D) | 33. (A) (B) (C) (D) |
| 14. (A) (B) (C) (D) | 34. (A) (B) (C) (D) |
| 15. (A) (B) (C) (D) | 35. (A) (B) (C) (D) |
| 16. (A) (B) (C) (D) | 36. (A) (B) (C) (D) |
| 17. (A) (B) (C) (D) | 37. (A) (B) (C) (D) |
| 18. (A) (B) (C) (D) | 38. (A) (B) (C) (D) |
| 19. (A) (B) (C) (D) | 39. (A) (B) (C) (D) |
| 20. (A) (B) (C) (D) | 40. (A) (B) (C) (D) |



Boy Scouts of America  
Awards Program  
**ATOMIC ENERGY MERIT BADGE**  
Princeton High School  
Friday, April 19, 1968

10

THE CINCINNATI ENQUIRER

Saturday, April 20, 1968

## Atomic Energy Merit Badges Awarded To 450 Boy Scouts

The largest single awarding of merit badges in Boy Scout history occurred Friday night at Princeton High School here.

Atomic Energy Merit Badges were awarded to 450 scouts in a single ceremony.

The ceremonies were preceded by a dinner at Imperial House. In attendance were high ranking national Boy Scout officials and representatives of the Atomic Energy Commission.

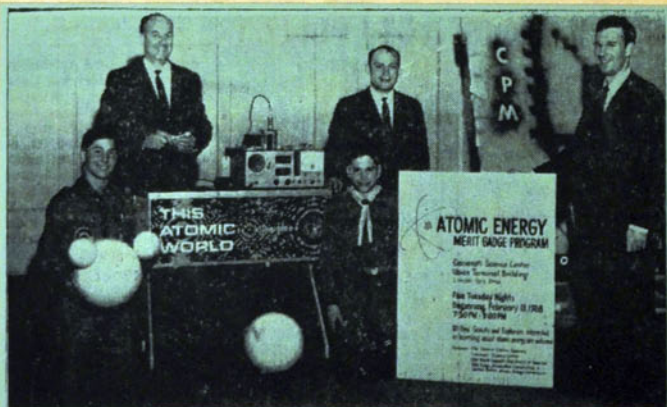
**THE COURSE** leading to the relatively new merit badge was directed by employees of General Electric in Evendale.

In a message to the assembled scouts, Dr. Glenn E. Seaborg, chairman of the AEC, said, "I recall that it was my privilege to take part in the presentation of the first atomic energy badges in New York in November, 1963.

"Since then, more than 8000 scouts have qualified for this honor," he said.

In order to qualify for the honor, a Boy Scout must master the fundamentals of atomic energy.

"I am hopeful any young man who has shown this much interest," Seaborg said, "will seriously consider the challenge of a career in nuclear science."



## Scouts Get Atomic Energy Badges

450 BOY SCOUTS from Dan Beard Council, including many from the Millcreek Valley area, will receive the first Merit Badges to be awarded in Atomic Energy tomorrow night, Friday, during ceremonies to be held at Princeton High School. The 450-strong class will be the largest merit badge class in the history of the Boy Scouts of America.

Shown here are, left to right: Marcus McDonald of Dan Beard Council; John Voltz of the Atomic Energy Commission; Sr. L. K. Keys, Nuclear System Program of the General Electric Co. in Evendale, and two of the scouts who will be honored, Robert Rau and George Pomeroy, also of GE, revealed that eight of the boys made perfect scores on their examinations.



# SEABORG TELEGRAM



Clarence Karl, Atomic Energy Commission Area Manager, Presents the Telegram from AEC Chairman Dr. Glenn T. Seaborg

## A MESSAGE FROM DR. GLENN T. SEABORG, CHAIRMAN OF UNITED STATES ATOMIC ENERGY COMMISSION

WE AT THE ATOMIC ENERGY COMMISSION WERE DELIGHTED TO LEARN THAT 442 YOUNG SCOUTS FROM THE DAN BEARD COUNCIL OF GREATER CINCINNATI HAVE QUALIFIED FOR AN ATOMIC ENERGY MERIT BADGE. AS A FORMER SCOUT AND A GRATEFUL GRADUATE OF THE MERIT BADGE PROGRAM, I SHOULD LIKE TO PASS ALONG MY PERSONAL CONGRATULATIONS. I RECALL THAT IT WAS MY PRIVILEGE TO TAKE PART IN THE PRESENTATION OF THE FIRST ATOMIC ENERGY BADGES IN NEW YORK IN NOVEMBER, 1963. SINCE THEN, MORE THAN 8000 SCOUTS HAVE QUALIFIED FOR THIS HONOR.

I SHOULD ALSO LIKE TO CONGRATULATE, ON BEHALF OF THE COMMISSION, THOSE PERSONS AND ORGANIZATIONS RESPONSIBLE FOR ASSEMBLING AND INSTRUCTING THE SCOUTS GATHERED TONIGHT TO RECEIVE THEIR AWARD. INCLUDED ARE "THIS ATOMIC WORLD", THE HIGH SCHOOL LECTURE DEMONSTRATION PROGRAM OPERATED FOR AEC BY OAK RIDGE ASSOCIATED UNIVERSITIES; THE CINCINNATI SCIENCE CENTER, GENERAL ELECTRIC COMPANY AND, OF COURSE, THE LEADERS OF THE BOY SCOUTS OF AMERICA AND OUR FRIENDS IN THE ATOMIC ENERGY COMMISSION'S CINCINNATI AREA OFFICE AND THE OAK RIDGE OPERATIONS OFFICE.

TO QUALIFY FOR THIS DISTINCTIVE HONOR, A SCOUT MUST MASTER THE FUNDAMENTALS OF ATOMIC ENERGY. I AM HOPEFUL ANY YOUNG MAN WHO HAS SHOWN THIS MUCH INTEREST WILL SERIOUSLY CONSIDER THE CHALLENGE OF A CAREER IN NUCLEAR SCIENCE. BUT WHETHER OR NOT HE CHOOSES THIS FIELD, I AM CERTAIN KNOWLEDGE OF THE BASIC CONCEPTS OF NUCLEAR ENERGY WILL MAKE HIM A BETTER ADULT CITIZEN OF THIS INCREASINGLY SCIENTIFIC AGE.



### FOR IMMEDIATE RELEASE

Telephone No. - Area Code 615  
483-8611 - Extension 3-4231

AEC AND OAK RIDGE ASSOCIATED UNIVERSITIES ASSIST  
SOME 450 SCOUTS IN ATOMIC ENERGY MERIT BADGE PROGRAM

The Atomic Energy Commission and its contractor, Oak Ridge Associated Universities, had major roles in conducting a unique Boy Scout program in which some 450 Cincinnati area Scouts were able to earn the Atomic Energy Merit Badge.

The youngsters, said by Scout officials to be the largest group ever to receive a single merit badge at one time, will be honored at an awards ceremony Friday night (April 19) in Cincinnati. More than 1,000 Scouts, parents, Scout leaders and other officials are expected to attend.

The AEC and ORAU were instrumental in enabling these youngsters to obtain this relatively new merit badge through a program of cooperation with the General Electric Company in Cincinnati -- another AEC contractor -- the Cincinnati Science Center, and the Boy Scouts of America.

Courtland S. Randall, Chairman of the Information and Exhibits Division of ORAU, will deliver the principal address on the subject of "Your Career and Atomic Energy." A highlight of the ceremony will be the presentation of a special note of congratulations to the Scouts from AEC Chairman Dr. Glenn T. Seaborg.

Credited with the idea of training such a large group of boys on the fundamentals and applications of atomic energy is John Volts, an Exhibits Manager for ORAU, assigned to Atomic Energy Commission exhibits work in the State of Ohio.

Volts, several GE employees, and Cincinnati Scout leaders gave many hours of their own personal time during five consecutive Tuesday evenings in February and March to present the merit badge program before an average attendance of some 500 youngsters each session.

Following the Official Boy Scout Handbook and a similar AEC publication, the group studied such subjects as radiation, isotopes, nuclear reactors and the structure of atoms. Each boy constructed models of electroscopes (radiation detectors) and nuclear reactors. The group also studied the effects of radiation on seeds which had been irradiated by GE in their Cincinnati facilities.

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## BOY SCOUTS OF AMERICA

New Brunswick - New Jersey 08901 - 201-249-6200

April 29, 1968

Mr. George W. Fomeroy  
600 Gody Pass  
Cincinnati, Ohio 45215

Hello George:

We're back now after several additional days in the field.

One of our first priorities is to express CONGRATULATIONS to you and related GE personnel for the excellent result getting Atomic Energy Merit Badge Project. This was of typical GE quality. Right? Right!

We look forward to the story about this Project and the others which preceded it for use in SCOUTING.

You are wonderful hosts!

Would you please advise the names and addresses of others whom you think might merit a letter from us about this success? Would you also please tell us the name of the GE official and his title with whom we had the privilege of visiting following the tour. He had some very pertinent observations about the significance of Scouting for business and industry.

Best wishes.

Cordially,

Wallace Hill  
Director  
Industrial Relationships

cc: Basil F. Starkey  
Scout Executive  
Dan Beard Council #438





## *MERIT BADGE PRESENTATION*





Box 788  
Russells Point, Ohio  
May 7, 1968

Mr. George Pomeroy  
General Electric Corporation  
Evanston, Ohio

Dear George,

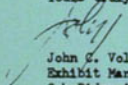
Now that the Atomic Energy Merit Badge Program has come to a successful conclusion, we can sit back, draw a sigh of relief, and perhaps wonder with a bit of awe at the turn of events that brought all of these scouts together.

This "turn of events" is largely due to the organization you gave to the early stages of this program along with the advertising and promotional backing of General Electric which you arranged.

I particularly appreciate your (and your secretary's) willingness to interrupt a busy schedule at any time to discuss and review any problems that developed in the program. A special thanks for all the work you went to after I left in arranging the graduation.

It has been a pleasure to work with you over the last several months on this program. Thank you for your time and cooperation.

Yours truly,

  
John G. Volts  
Exhibit Manager  
Oak Ridge Assoc. Universities

ATOMIC ENERGY MERIT  
BADGE PROGRAM

June 6, 1968



POST 303's 1st EAGLE SCOUT  
AWARD CEREMONY





FRED W. GARRY PRESENTS THE DAN BEARD COUNCIL  
SILVER BEAVER AWARD TO GEORGE POMEROY

## Community Activities Award

This award recognizes distinctively outstanding work or contribution in service to the community.

### Winner

The team of Leonard Landau, CFM56-5 Project manager, and Roger Pfalzgraf, Configuration Management Systems manager, have served as chairman and advisor, respectively, for the AEBG-sponsored Scouting Explorer Post 303 since 1978.

Their sustained commitment has provided hundreds of high school boys and girls with the opportunity to learn at the Evendale Plant about technical careers in engineering, drafting and manufacturing, and has resulted in many of these talented young people pursuing such career fields. This effort is an effective example of continued

dedicated service to our community.



Len Landau

Roger Pfalzgraf

EXPLORER POST  
303

*1987 General Electric*

LASER CENTER TOUR

**Evendale Engineers' Day February 17, 1987**





The Cincinnati Enquirer/John Curley

Explorer Scout Robin Stow, a sophomore at St. Xavier High School, examines a piece of high-tech equipment at GE Evendale.

## GE plant explored by Scouts

### Teens, young adults introduced to world of technology

BY MARY KAY GILBERT  
Enquirer Contributor

**G**eneral Electric's Evendale plant, the nation's leader in the design and development of aircraft engines, is by necessity a place of badges, tight security and closely watched gates. It is off-limits to the casual passerby or tourist.

Select teen-agers and young adults, however, penetrate the security every Wednesday night. They are members of Explorer Scout Post 303, "the oldest and largest post in the state, possibly in the country," according to Lenny Landau, post chairman and manager of the CFM56-5 Program at GE.

Post 303, now in its 30th year, is a career-oriented post, that introduces male and female students, ages 15 through 21, to the world of high technology.

"We try to help kids make sound career judgments," explained program chairman Roger Pfalzgraf, manager of configuration management systems at GE. "We give them a flavor of the requirements they need to pursue a career in a technical area."

#### Varied subject matter

Each week the Explorers divide into groups and visit different areas of the plant.

On a recent Wednesday, they marveled at the ability of the scanning electron microscope to magnify common pepper 200 times. They listened attentively as technician Ivan Miller explained how the microscope is used in working with alloys.

A favorite part of the evening for many of the students was a visit to the composites lab, where they learned how composites improve GE engines. Photos of the new B2 Stealth Bomber prompted questions on

speed, predictability and the process of its development.

A committee of 12 GE employees helps Pfalzgraf set up the program and recruit volunteers from the GE staff. GE pays for the program and several hundred GE employees volunteer their time and expertise.

The students come from throughout Greater Cincinnati. For some, the program is so fascinating that they return the next year. John Wagner, 18, of Price Hill, is attending for his third year. "It's different every year," he said.

The program has helped Wagner choose a career. "I knew I liked computers and electronics," he said. "After seeing what electrical engineers do, I've decided that's what I want to be."

Eddie Hawkins, 16, of College Hill, was so tired from a day of school followed by work at a drug store that he had trouble staying awake during a videotape. Yet he considers it important to be in the program. He wants to be an engineer, and GE is giving him the chance to find out what an engineer does.

"I've learned how an engine works," Hawkins said. "And . . . I've learned how everyone works together; one part can't function without the other."

Sophomore Mike Thierauf of Loveland has a few years before he has to make a decision about a career. He is taking in all the information, all the expertise, and carefully considering if this is the field for him.

Linda Thiemann, 16, of Deer Park, and her friend, Colleen Smith, of West Chester, are interested in careers in a high-tech industry. "I'd recommend everyone have the opportunity to learn about the technical fields through such an experience," Thiemann said.

## NEWSPAPER IN EDUCATION

For information about The Enquirer and The Post's Newspaper in Education program call our NIE Coordinator at 369-1717





GE Aircraft Engines  
October 15, 1990

# Headlines

## Program helps young minds explore future

Great notions slip into the minds of teens and suddenly their sights are set on the pursuit of the future. It's a risky gamble, deciding early on what to do for the rest of your life. A program at GE Aircraft Engines Evendale called Explorer Post 303 alleviates some of the guesswork.

Explorer Post 303 is a Boy Scouts of America-sanctioned program that allows high school and college age youth (boys and girls) the opportunity to explore the high technology future of industry.

Lenny Landau, CFM International director of Product Support & Operational Planning and Rolf Bick, program manager, CF6-80 Tooling/Support Equipment, are local GE co-chairmen of the Explorer group. Landau says the 14-week program which begins in November gives young men and women the opportunity to sample the fare of life without deciding on a permanent main course.



Teens in last year's Explorer Post program learn about bridge building.

"You know a lot of youngsters don't even consider careers as an engineer or scientist because they've never been exposed to what people do in technical fields," Landau says. "The Explorer program at GE Aircraft Engines provides an opportunity to

see what people do in a variety of technical fields. It also provides insight into the background and training that's necessary."

Landau also says that the program, now in its 33rd year and the oldest and largest one in the

state, has the advantage of offering young people insight into specific careers and into the aircraft engine business at the same time.

Help is needed from employees interested in serving as advisors. These are the people who come every week and keep the group organized and pointed in the right direction. "As an advisor you'll find out what's going on all over the plant," says Landau. "You could be here 10 years and not see some of the things you might if you're involved in the Explorer program."

For those employees with youngsters or friends interested in the program, a kickoff meeting will be held on November 14 at 7 p.m. in the Bldg. 800 auditorium. A fee of \$9.20 is charged to cover Explorer registration. All other costs are paid by Aircraft Engines. Employees interested in serving as advisors or who want to make reservations for the meeting should contact Lesa Miller at 552-3420.

Many strong, dedicated Elfuns contributed to the success of Explorer Post 303 (you will no doubt recognize many of the faces in the photographs on the following pages). They are applauded for their dedication and commitment; their real reward has come, however, in them being able to see how their efforts have impacted the lives of America's future leaders.

The Post meets weekly for approximately 14 weeks. Each week, a different technical career is explored within GE Aircraft Engines, through tours, hands on experiences, simulated technical activities and other planned activities.

The objective of the Explorer Program today is to show young adults the wide range of technical careers available in a business like GE Aircraft Engines.

Each year the Post typically signs up 80+ members (boys and girls) from 30+ different schools in the Greater Cincinnati area. We have selected the year 1989-1990 with accompanying photographs to show some of the activities from the various program nights.



# ROSTER 1989-1990

15	Elliott, Chris	Batavia High
34	Howard, Todd	Batavia High
39	Jentzen, Tony	Batavia High
18	Fisher, Keith	Carlisle High
41	Keller, Randy	Colerain High
11	Clark, Chad	Connersville Sr. High
1	Bailey, Michael	D. Russel Lee
60	Sharp, Bill	D. Russel Lee Voc.
22	Frey, Erik	Dixie Hgts. High
19	Folster, Kevin	Edgewood High
26	Handy, Les	Edgewood High
49	McClung, Don	Edgewood High
54	Prushing, Joseph	Edgewood High
82	Young, Mathew	Edgewood High
46	Lim, Larry	Elder High
75	Wagner, John	Elder High
2	Bowden, David	Fairfield High
20	Francis, Shaine	Fairfield High
27	Harmon, Michael	Fairfield High
29	Hetterich, Brian	Fairfield High
30	Hettinger, Andrew	Fairfield High
31	Hettinger, Chris	Fairfield High
32	Hooker, Shawn	Fairfield High
44	Lane, Michael	Fairfield High
61	Singleton, Christopher	Fairfield High
62	Singleton, Craig	Fairfield High
68	Tomblin, Christine	Fairfield High
69	Tomblin, Michelle	Fairfield High
77	Waller, Chase	Fairfield High
45	Lewis, Elbert	Finneytown High
80	Wilson, James	Franklin High
4	Brainch, Iqbal	Lakota High
7	Buckley, David	Lakota High
9	Carpenter, Joey	Lakota High
50	Miller, Keith	Lakota High
56	Reinker, Eric	Lakota High
63	Snead, Norman	Lakota High
66	Stewart, Shannon	Lakota High
71	Vanas, Josh	Lakota High
72	Varadarajan, Uday	Lakota High
83	Vasan, Mohan	Lakota High
73	Volavka, Jessica	Lakota High
76	Wallace, Brian	Little Miami High
37	Hyatt, Amy	Madison High
23	Gray, Mike	Middletown High
35	Hughes, Jeremy	Middletown High
79	Williams, Jelany	Middletown High
10	Chaney, Alex	Milford High
21	Frank, Gary	Milford High
14	Daniels, Mike	Mt. Healthy High
6	Brockman, Brad	Newport Central Cath.
43	Kremer, Scott	Newport Central Cath.
12	Cox, Brian	Norwood High
24	Grunenberg, Dell	Norwood High
48	Martin, James	Norwood High
74	Vordemesche, Chris	Norwood High
33	Howard, Michael	Oak Hills High
42	Kitchens, Andy	Oak Hills High
52	Neumeister, Rob	Oak Hills High
59	Schehr, Joseph	Oak Hills High
65	Springmyer, Heather	Oak Hills High
78	Willett, Brian	Oak Hills High
5	Bremanis, Andrew	Princeton High
28	Hazeley, Damian	Princeton High
51	Nelson, Kevin	Princeton High
55	Rajendran, Vijay	Princeton High
38	Jamleson, Gregory	St. Xavier High
16	Ennis, Douglas	Sycamore High
13	Dance, Chris	Union County
3	Bowers, Timothy	Union County High
58	Rude, Tim	Union County High
8	Cammerer, Brian	Walnut Hills High
25	Hahn, Michael	Walnut Hills High
36	Huynh, Kha	Walnut Hills High
53	Price, Shawn	Walnut Hills High
57	Richter, Sharon	Walnut Hills High
64	Spaeth, Nathan	Walnut Hills High
67	Struble, Givon	Walnut Hills High
70	Tully, Brandon	Walnut Hills High
81	Mittrock, Don	Walnut Hills High
47	Love, Demetrious	Western Hills High
40	Jesus, Peter	Withrow High
17	Ennis, Lisa	Xavier University

## EXPLORER POST 303

### 1989-1990 PROGRAM SCHEDULE

PROGRAM NO.	DATE	DESCRIPTION	GATE
1	16-Nov-89	FIRST NIGHTER	26
2	30-Nov-89	JET ENGINE ORIENTATION & PROD. ASSEMBLY	26
3	07-Dec-89	COMPUTER CENTER TOUR	26
4	14-Dec-89	ENGINEERING, WHAT DO ENGINEERS DO?	50
5	11-Jan-90	BEING A DRAFTSMAN/COMPUTER GRAPHICS	50
6	18-Jan-90	COMPUTER GRAPHICS/BEING A DRAFTSMAN	50
7	25-Jan-90	MATERIALS AND PROCESSES	50
8	01-Feb-90	PROCESS PLANNING	26
9	08-Feb-90	MAKING A PART	26
10	15-Feb-90	ADVANCED MANUFACTURING CONCEPTS	26
11	22-Feb-90	QUALITY/INSPECTION	26
12	01-Mar-90	DEVELOPMENT ASSEMBLY & TEST	50
13	08-Mar-90	CUSTOMER SCHOOL - PRODUCT SUPPORT	50
14	15-Mar-90	JET ENGINE MUSEUM & PROGRAM REVIEW	50
15	22-Mar-90	CLOSING PROGRAM	50

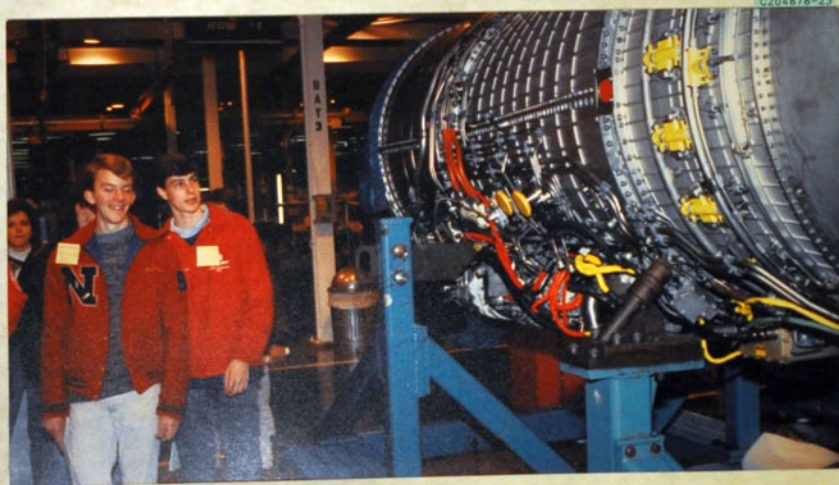
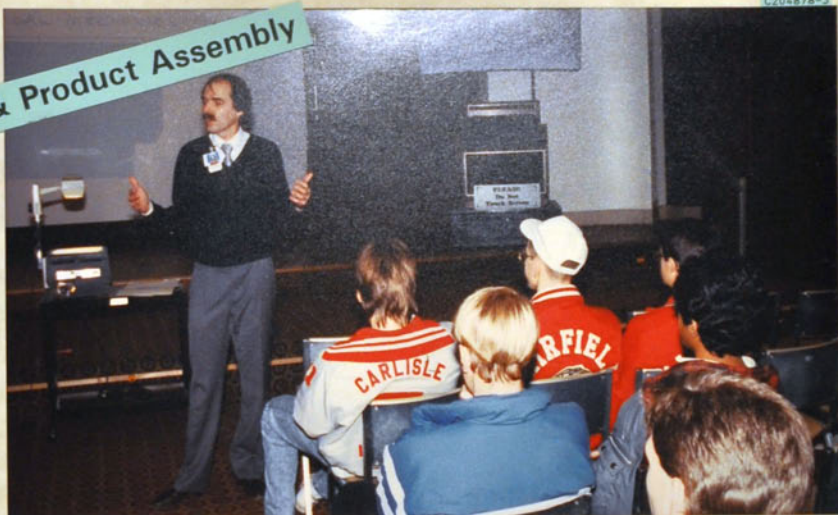
PROGRAM CANCELLATION DUE TO WEATHER (OR OTHER REASONS) WILL BE ANNOUNCED ON MCR-AM.

SPONSORED BY  
GE AIRCRAFT ENGINES



Jet Engine Orientation & Product Assembly

November 30, 1989





C204878-10



Jet Engine Orientation & Product Assembly

November 30, 1989

C204878-17



C204878-27





# Engineering, What Do Engineers Do?

C206332-12



December 14, 1989

C206332-17



C206332-18



C206332-22



C206332-27



C206332-26





C206332-13



C206332-30



C206332-43



C206332-9



C206332-6



C206332-39





# Computer Graphics/Being a Draftsman

January 18, 1990

C207733-5



Post 303 COMMITTEE 1989-1990

(Rolf)	Bick, R.
(Mark)	Brands M. H.
(Katie)	Brulport, K. J.
(Gene)	Hauser, E. M.
(Len)	Landau, L.
(KG)	Mani, K. G.
(Donald)	McKinnon, D.
(Ken)	Rogers, K.
(Ramesh)	Shanbhag, R. K.
(Jon)	Stow, J. J.

C207733-25



C207733-31



C207733-13



C207733-9





# Computer Graphics/Being a Draftsman



January 18, 1990





# Materials & Processes

January 25, 1990

C208207-6



C208207-3



C208207-8



C208207-16



C208207-4



C208207-21





C208974-9

C208974-2

# Process Planning



February 1, 1990



C208974-21



C208974-16



C208974-13



C208974-22



C208974-25





# Development Assembly & Test

March 1, 1990



C211121-18



C211121-6



C211121-9



C211121-14



C211121-21



C211121-24



# Jet Engine Museum & Program Review

C211851-4



March 15, 1990

C211851-27



C211851-6



C211851-32



C211851-14



C211851-9





March 15, 1990

# Jet Engine Museum & Program Review



March 22, 1990

## Closing Program





C212131-11



C212131-17

Closing Program

March 22, 1990



C212131-26



C212131-14



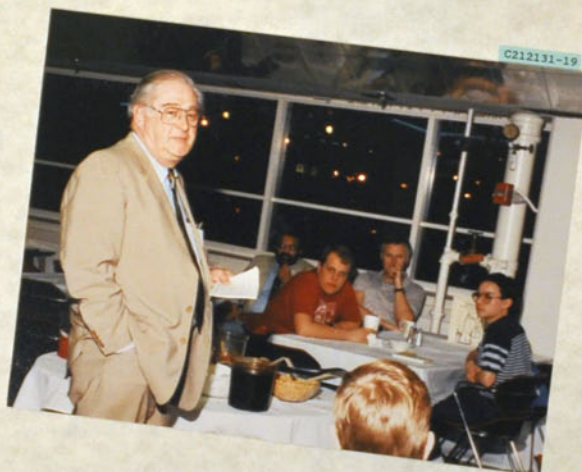
C212131-28



C212131-21



C212131-19





# SCOUTING DIVIDENDS

Spring 1992

Friends of Scouting  
Newsletter

Dan Beard Council, B.S.A.

## Randolph and General Electric to Receive Good Scout Awards



JACKSON RANDOLPH  
C & E



BRIAN ROWE  
GENERAL ELECTRIC



JOHN CLENDENIN  
BELL SOUTH



CLEMENT BUENGER  
FIFTH THIRD BANCORP

The annual Good Scout Award Luncheon on Thursday, May 14, 1992 will honor **G.E. AIRCRAFT ENGINES** with the *Good Scout Award for Corporate Leadership* and **JACKSON RANDOLPH** with the award for *Individual Achievement*. **BRIAN ROWE**, Senior Vice President will be accepting for General Electric.

Luncheon Chairman **CLEMENT BUENGER** believes the honorees perfectly fit the Good Scout Award requirements: "Honorees are to be an individual and business that has provided outstanding leadership to the community for many years. Leadership must be expressed in many worthwhile causes developing deep respect and esteem by the community. Jack (Randolph) and G.E. exceeded all the requirements."

The luncheon will be a featured highlight of the National Boy Scout Meeting being held here May 13-15. **JOHN CLENDENIN**, Chairman and CEO of **BELL SOUTH** will be the featured speaker.

Proceeds from the Good Scout Award Luncheon provide significant support to the year-round programs of Dan Beard Council. If you are interested in attending call **BUENGER** at 579-5382 or the Scout Center at 961-2336.



*Cincinnati '92*

## Boy Scouts of America

Annual Meeting

May 13-15, 1992

Cincinnati, Ohio



You are invited to the

## Good Scout Award Luncheon



Honoring  
GE Aircraft Engines  
and  
Jackson H. Randolph

Thursday, May 14, 1992  
The Westin Hotel  
11:30 a.m.

Luncheon Chairman  
Clement L. Buenger  
Fifth Third Bancorp Chairman



## Good Scout Award Luncheon

*Honoring:*  
GE Aircraft Engines  
and  
Jackson H. Randolph

THURSDAY, MAY 14, 1992  
THE WESTIN HOTEL

Luncheon Chairman  
Clement L. Buenger  
Fifth Third Bancorp Chairman

5979-7









# CORPORATE LEADERSHIP AWARD



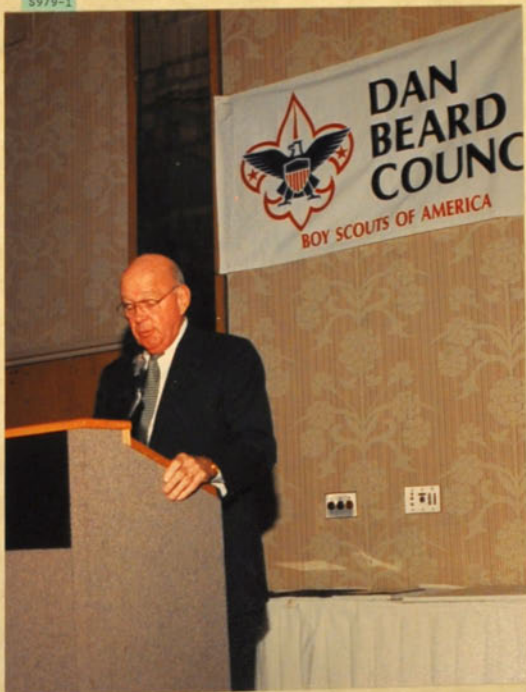


S979-14



# GOOD SCOUT AWARDS

S979-1



S979-5

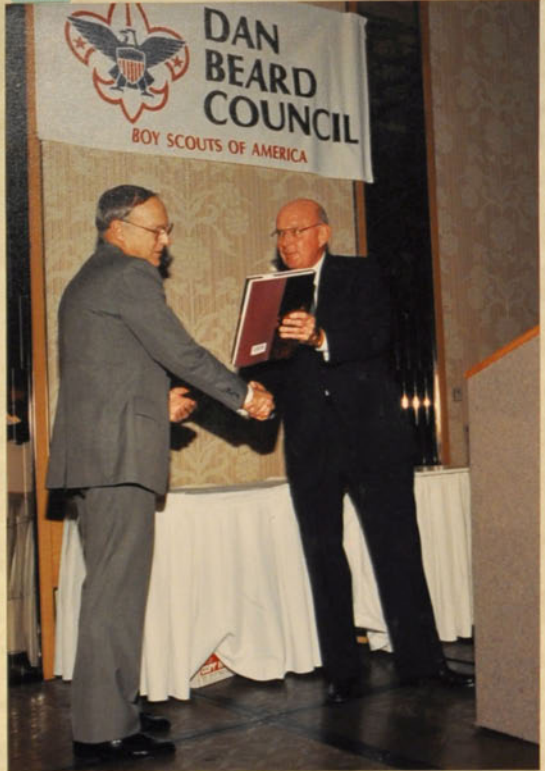




S979-15



S979-11



S979-2



# GOOD SCOUT AWARDS

S979-16





# Han Beard Council Boy Scouts of America



PRESENTED TO

GE - AIRCRAFT ENGINES

IN RECOGNITION OF

35 YEARS AS A POST

APRIL 14, 1993

DATE

## GE's Explorer Post 303 celebrates 35th year

When GE Aircraft Engines' Explorer Post 303 kicks off its 1992-93 agenda next month, it will mark three and one-half decades of service to this region's next generation of engineers. At 35, GE's is the oldest Explorer Post in Greater Cincinnati and one of the oldest in the nation. "GE's is our largest and most talked-about Explorer Post," says Tim Koenig, the Boy Scout Council's Exploring director.

The Explorers is a non-uniformed career development program sanctioned by the Boy Scouts of America. Each post focuses on a different career. Hospitals, police and fire departments, Playhouse in the Park and numerous corporations sponsor Explorer programs each year, affording students hands-on experience in their career field of choice. Young men and women ages 15 to 21

(age 14 if they are in the ninth grade) are invited to join any of the nearly 100 posts in the Greater Cincinnati area.

### Focusing on technical careers

Sponsored by the Elfun Society, Explorer Post 303 is a technical career-oriented post established to introduce explorers to various engineering disciplines. This year's 13-week program will run Thursday evenings, 7 to 9 p.m., from mid-November to late March. Activities include plant tours, speakers and videos, hands-on experience as well as special projects to aid explorers in understanding the wide variety of career paths that are possible with an engineering education.

"Often students do not even consider careers as engineers or scientists because they've never

been exposed to what people do, day to day, in these technical fields," says Lenny Landau, CFMI Operational Planning director and co-chairman of Post 303. "The Explorer program at GE provides an opportunity to

*(Continued on page 2.)*

**Explorer Post 303**  
introduces young men  
and women to various  
engineering disciplines.



learn about a variety of technical fields, providing insight into specific education and training needed along the way. The younger the students get involved, the more help the program will be to them in their career decision making."

### GE people make it work

Rolf Bick, Customer Support Program manager in the Commercial Product Support Department and Post 303 co-chairman, says hundreds of GE volunteer advisors are committed to continuing this successful program. "Employees are encouraged to become advisors, lending their time and expertise to talk one-on-one with the explorers and demonstrate what they do. This year, among other things, we will cover drafting, quality control, process planning, advanced manufacturing concepts and materials technology, as well as design and development engineering," says Bick.

Aircraft Engines' Larry Meyer, photo-mechanic engineer, was a member of Post 303

from 1977 to 1979. Meyer credits his Explorer experience for his decision to pursue an engineering career. "Through the post, I learned about GE's apprentice program. I applied and was accepted. Now, I've worked my way through night school at the Ohio College of Applied Science and have my bachelor's degree in mechanical engineering technology."

### Orientation meeting

An orientation session will be held on Thursday, Nov. 12, from 7 to 8 p.m. in the Bldg. 800 auditorium. The Post's 1992-93 agenda will be discussed, and the Explorer's Tim Koenig will be on hand. Reservations are required and can be made by calling Rolf Bick at 552-2426. Due to limited seating, each student is asked to bring just one parent. A fee of \$9.20 is charged to cover registration.

GE employees interested in volunteering their time to the post should also contact Bick for more information.



11-11-93

Dear Mr. Buck,

I am writing to thank the  
Explored Post 363 at the  
Aircraft Engines for offering  
this program to interested  
students.

My daughter, Sam Obernecst  
participated in the program  
last year. She enjoyed it and  
I think it sparked her interest  
in engineering as a career.

I wanted to let you know  
that along with her good  
grades and enthusiasm for  
learning, this program was  
instrumental in getting her  
chosen as one of fifty-four  
participants state-wide in  
the Ohio Space Academy's  
trip to Florida this past  
August. She received an  
all-expense paid trip to  
Epcot, the Kennedy Space  
Center, Sebastian Beach, and  
the M. Paul Magner School.

I thought you'd like to  
know that your program is  
accomplishing the goals you  
set and that it is something  
appreciated in the community.

Thank you again for all  
your time and effort in  
establishing the program +  
making sure it runs smoothly.  
Also extend my gratitude to  
all the other people involved  
in it.

Sincerely,

Kathy + Dave  
Obernecst

**Dan Beard  
Council**



**Boy Scouts  
of America**