

'Bubble' Entertains Children

By: Debbie Nicotra

A room-size balloon called the 'Bubble' has been enchanting children audiences with its vivid presentations of children's stories by participating PSEA members.

An Environment

The Bubble is an audio-visual aid that acts as an environment for children watching a presentation so that they can become a part of it. Films, slides, or other pictures are projected on the sides of its walls and music or taped voices can be played from outside and heard within. A narrator sits inside with the children accompanied by displayed decorations in completing the Bubble's affective presentation.

This semi-transparent audio-visual aid is made from squares or rectangles of polyethylene plastic that are held together with aluminum electrical tape. A large tube-like structure is constructed to fit a house fan and

attached to the bubble at one of the corners. A slit is cut vertically and reinforced for the door. When the fan is turned on the 32' x 24' x 7' Bubble inflates and a gentle current of air passes through the audiences out the door. When deflated, the Bubble can be folded up and easily transported, along with the fan and decorations, in a car trunk.

Children Fascinated

The Bubble entertains audiences of children at churches, elementary and nursery schools,

and other places where children are available to see the presentations. Their reactions to the plastic world presentations have been "very excited and astounded". For instance, at the Christmas presentation of "The Littlest Angel", one girl was awed by the fact that "God's voice came from out of nowhere."

The Bubble needs people to help develop new programs and to carry them out. Anyone's interest in helping will be greatly appreciated in continuing the children's enjoyment.

Engineering Student Designs 'Bike Of The Future'

University Park--Is a bicycle that has the strength of steel and the weight of cardboard an impossible dream?

"No", says Carl M. Sara, of North Olmsted, Ohio, a junior in mechanical engineering at The Pennsylvania State University who has devised a vehicle which might lead to such a bike. He got the idea for designing a "bike of the future" while working at Union Carbide Corp. last summer and his efforts were noted this fall at a Union Carbide conference in Boca Raton, Fla., where educational and corporate personnel discussed the training and utilization of young engineers.

Plastic Frames

"I started putting the bike together in my spare time", explains Sara, who structured the frame of the vehicle from a Union Carbide experimental material. The composite material consists of an epoxy resin as matrix, reinforced with a graphite fiber called THORNLEL, a trademark of Union Carbide Corp.

"Although it is a plastic, its properties are quite different from other plastics," says Sara, who explains that the material's ultra-high modulus make it a more flexible plastics. The material is of interest to the aerospace industry because it is strong, yet light in weight.

Bike Tested

Sara's bike is fastened together by chrome-moly steel joints. He has had it on the road for approximately 370 miles but the vehicle hasn't been developed to the point where it can withstand great impacts. The first frame of the test bike, according to Sara, weighed "considerably less" than an ordinary steel

frame.

His immediate goal is to make a durable graphite bicycle frame. But first, Sara must obtain more information on structural materials.

He is collecting basic information such as the modules of elasticity and ways the percentage of fibers and binder loading affect the density of the material.

Further Research

He hopes to pursue the project further during an undergraduate thesis study which he plans to take during the next two years. The course provides the opportunity for students to undertake individual work in some branch of mechanical engineering.

Meanwhile, Sara intends to continue his preliminary research on the vehicle under the supervision of Dr. David M. Parke, associate professor of mechanical engineering.

For his second test vehicle, Sara hopes to further reduce the weight of the frame by making structural changes in the vehicle itself. There are various prototypes in the planning stages.

Sara would eventually like to do graduate work at Penn State on composite structure research in the Dept. of Mechanical Engineering. He hopes to return to Union Carbide this summer to work in the carbon fiber technology department of the carbon products division.

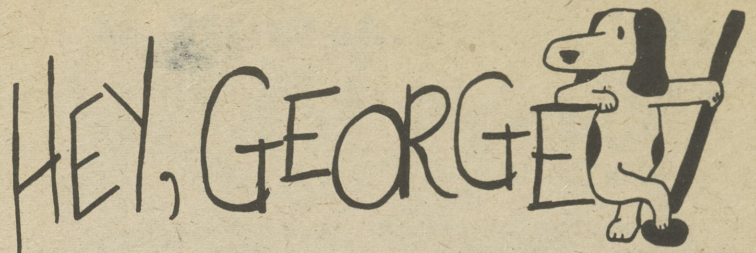
P.I.R.G. Program

(Continued from Page 1) investigations, but also in lobbying and litigation procedures. There is also an administrative executive (also hired by the board) who is in charge of all proceedings during the breaks.) **Petition Favored**
The group is at present petitioning the Board of Trustees at P.S.U. for acceptance into the University system for funding purposes. Acceptance is necessary for the initiation of the proposed funding mechanism. The petition was received favorably by the Educational Policies Committee of the Board of Trustees recently and the petition will be re-submitted to the Board itself at its next meeting.

If approved, funds shall come from contributions of \$2 from each student at the start of each term. If a student doesn't care to back Penn P.I.R.G. financially, he will have his money refunded upon request)

It is not necessary to have contributed the money to obtain aid from P.I.R.G. All problems will be welcome. Penn P.I.R.G.'s projects will be made up not only of individual student problems, such as rent increases, but of entire community problems, such as an environmental threat.

(Continued on Page 4)



By: Susan M. Siciliano

As you wander down the halls of this campus, there are many familiar and fuzzy faces, even after several cups of coffee. But, none is as famed as that of George, our good, faithful, flat-footed friend. In fact, he is the only one who always has his feet on the ground--all four of them.

If we can stop him on his adventurous journey to the lounge, maybe we can find out what makes him so devoted and loyal.

ME: Hey, George! How's life treating you?

GEORGE: Ruff.

ME: Could you go into a little more detail?

GEORGE: Ruff.

ME: Come on George! It couldn't be that bad!

GEORGE: Oh yea? Well, you try truckin' over here early in the morning to find nothin' but (yuck) coffee and empty Tastykake machines and tell me things ain't ruff!

ME: So what do you do here that's so exciting?

GEORGE: If you ask the kids, they'd say "mooch." I roam the halls, let the kids feel good by letting them scratch my belly and feed me. Wish I could read though. Sometimes it's good to know what's going on.

ME: Then you're illiterate?

GEORGE: I don't think so. Mom said she knew my dad.

ME: I mean, you can't read?

GEORGE: I thought I already said that, or is there an echo somewhere?

ME: Does this place live up to what college life is supposed to be?

GEORGE: Kinda. But where's all that stuff about "Sex in the classroom" and "Swingin' Co-eds" and--

ME: So that's your kind of excitement!

GEORGE: Well, I wouldn't mind it. I've heard some pretty exciting things go on in those vans! But this place doesn't even come near to that. I've seen more social life in a ring worm. I mean I've heard there's actually been some parties here but they musta been rumors 'cause nobody else knew about them.

ME: What about Monte Carlo?

GEORGE: Never heard of the guy. He anything like a count?

ME: The Halloween and Christmas parties?

GEORGE: I gave in the parkin' lot.

ME: But you said--

GEORGE: Hey, don't get me wrong, but the only stuff I know about is what I hear the kids talkin' about, like raisin line...

ME: Grape-vine.

GEORGE: I knew it had something to do with grapes. Hey! You know a lot of things have been goin' on around here. Like, did you ever wonder where that big trench came from? If you ask me, I think it's a gigantic groundhog, and he's hiding in the basement of the school --

ME: Oh, come on...

GEORGE: And did you ever notice how thick the coffee's been getting? Well, where do you think they've been putting all that mud?

ME: Now that's a little hard to swallow.

GEORGE: You're telling me! And what about those modular buildings? They said March, but did they also mention the year?

ME: Now wait a minute...

GEORGE: We've all been waiting.

ME: Well, I've gotta go...

GEORGE: Down the hall on your ri-

ME: Thank you, George. Do you have any parting words?

GEORGE: Life is like an emory board. Ruff on both sides, but if used right, things always smooth out in the end.

Poetry Corner

UNANSWERED QUESTION

By: Gen Belfiglio


You
are as free as the
ocean,
leaving no shell turned,
no shore untouched.

always exploring!
you collect a vastness of
knowledge and maintain an
unfathomable depth.

you can be
as gentle as a ripple
of the water,
but
the love you diffuse to
the world is as powerful as
the crashing surf.

in your openness,
you preserve an air of
mystery;
and beneath your shining
vivacity is an undetectable
somberness -
as dark as the water itself.

Will You??
suck me under, then relinquish
me to the shore ...
Or Will You??
embrace me with the tide, and
Sparkle My Life
with reflections
of the sun ...



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