PAGESTHREE



Nancy Welch Junior French major from Alexandria, Va. ... member of Kappa Alpha Theta sorority

Janet Hartzell Sophomore speech pathology and audiology major from New Cumberland . . . member of Junior art education major from Wormleysburg Junior English major from Gibsonia . . . member Senior English major from Arlington, Va. . . Delta Gamma sorority

Deborah Stevens

Jane Yates

of Delta Gamma sorority

Susan Hanst

member of Pi Beta Phi sorority

Motorcade To Feature Queen, Finalists

... member of Kappa Kappa Gamma sorority

By CHUCK MENSCH Collegian Staff Writer

A motorcade and pep rally will kick-off the 1966 Homecoming Weekend, Friday evening. This year's Homecoming Queen will be introduced at the rally.

Included in the motorcade will be Sue Hawthorne, 1965-66 Homecoming Queen, the five 1966-67 Homecoming Queen finalists, the Uni-versity Cheerleaders, the Penn State 'Lion,' float cars prepared by various campus groups, the University Blue Band, several fire trucks with about 200 vehicles in all, according to Dick Lippin, publicity chairman of the Undergraduate Student Government Homecoming Committee.

Following the motorcade there will be a pep rally in the Pollock Circle sponsored by the Block 'S'. Mark Sussman, president of Block 'S' said WMAJ disc jockey James K. Kepler will

emcee the rally. The winners of the window painting and banner contests will be announced at the rally.

A USG Homecoming Jammy featuring "The Norsemen" and "The Intrigues" will be held from 9-12 in the Ballroom of the Hetzel Union Building Friday night, following the pep rally.

Campus walking tours, open houses, recep-tions and coffee hours at the colleges and departments will be among the activities on Saturday morning for the returning alumni.

Cwens, sophomore women's honor society, and other coeds will conduct the campus walking tours from 9 a.m.-12 noon. The tours will begin at the alumni registration desk in the

About noon a motorcade of six antique cars carrying the Homecoming Queen and her court will leave the HUB for Beaver Stadium where the Homecoming Queen will be introduced in a

Today is the last day of voting for the 1966-67 Homecoming Queen. Balloting may be done from 9:30 a.m. to 4:30 p.m. at the Homecoming booth on the ground floor of the Hetzel Union Building. An activities card is required to cast a

ballot for the queen candidates. The candidates, as pictured above, are Nancy Welch, Janet Harizell, Deborah Stevens, Jane Yates and Susan Hanst.

pregame ceremony.

Saturday evening will be the highlight of the Homecoming weekend, with the HUB the center of activities. There will be a free homecoming dance with Bruce Peterson and his 12piece orchestra and free cider. The dress for

this dance is semi-formal.

At the dance the trophies for the homecoming contests will be awarded and the 1966 Homecoming Queen will be formally presented.

Downstairs in the HUB the This 'n That coffee house will feature free admission and entertainment. Along with the usual program, the Munchkins from Philadelphia will be the main feature in the coffee house,

For those who yearn for the good-old-days or those who would just like to see some old time movies, the Nickelodeon Nite in the HUB assembly hall will offer free admission to both its 9 p.m. and 10:15 p.m. shows.

Last, but not least on the Saturday evening program is the Las Vegas Casino, "Home of the Big Spender\$," on the ground floor of the HUB where there will be legal gambling with 'Lion Money.

Included in the features of the casino are

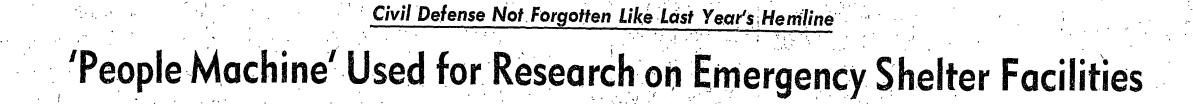
door prizes, auctions, roulette, chuck-a-luck, and dice. The Las Vegas equipment will be loaned to the Homecoming Committee by the Town Independent Men's Council and will be operated by the Sophomore class,

A Horticulture Show, golf tournament, and azz concert will be the final events of the 1966 omecoming.

The 53rd annual Horticulture Show will be pen in the Ice Pavilion from 9 a.m. until 5 p.m.;

The 18-hole golf tournament will begin at 9 a.m. and end at 5 p.m. There will be two categories, students and alumni, for which there will be separate prizes. There is no entrance fee except the required greens fee.

Sunday afternoon the Jazz Club will pre-sent an admission-free concert by the Ron-Carter Trio. It will begin at 2 p.m. Sunday evening Tom Rush will appear in concert for the Folklore Society.



"A "people machine" was locked in a large residence hall at the University this past summer.

It found out just how uncomfortable a crowded building can be on a hot day. The "people machine" was designed by building engineers to discover just how many real people could be accommodated in a public building in cases of emer-

gency, as in a fallout shelter. Although like last year's hemline, the fallout shelter may now be out of style, not everyone has forgotten it. Under Office of Civil Defense contracts, many teams all over the country are studying the problems involved, according to John Everetts Jr. and Everett R. McLaughlin, professors in charge of the project, and

Robert Allen, research assistant. The University's Institute for Building Research converted a seven-story girls' residence hall into a large-scale summer laboratory as one piece of a jigsaw puzzle to be fitted into the big picture by the Stanford Research Institute, prime contractor with the OCD for the problem of unventilated shelters.

The proper name of the "people ma-

chine" is Simoc, or simulated occupant. Ten of these mechanical "people" were installed throughout the empty residence hall. Each Simoc could be adjusted to "breathe" into the closed building the re-guired amount of moisture which would be given off by, any number of persons up to 60

The Simocs are essentially a humidifier and heater which can automatically add the amount of water generated by the breath and sweat of any number of people for which the machine is set. Research has established that a person

gives off 400 BTU's or 100 Calories of energy per hour when conditions are at 95 degrees and 50 per cent humidity — the maximum tolerable limit.

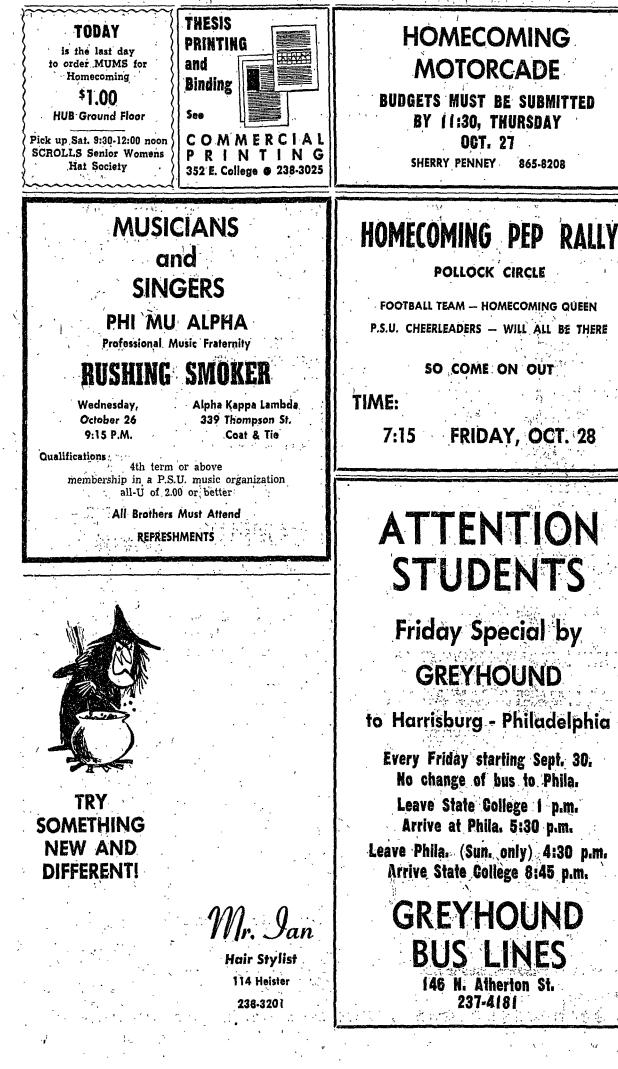
In order to determine the natural ventilation of the residence hall, tracer gas was injected into the building through an elaborate network of tubing. Instru-mentation in the hall's lobby followed the progress of the gas through the building and monitored the amount on any given

floor at any moment. This process, developed by Univer-sity engineers for an OCD research project the previous summer ,enabled the researchers to trace the passage of air from the outside in and to determine the

number of air changes on any floor. By relating the knowledge of natural ventilation to both outside and inside tem-peratures, the researchers could calcu-late the required amount of space per person necessary to keep conditions be-low the maximum tolerance level.

An arbitrary figure of 10 square feet per person has been used in the past as a basis for designing most fallout shelters. In cold months this space would be adequate. But the humidity intensified by perspiration on a hot summer day causes extreme discomfort approaching physic-logical and psychological stress, making this figure unrealistic, Everetts said. The more people assigned to the usable space, the faster the maximum tolerance condi-tion is reached.

When the basic data from the summer's research are analyzed, they are expected to aid in understanding what limits the weather imposes on the occupancy of similar public buildings pressed into service as fallout shelters.



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