

SMOOTH AND DREAMY—One thousand couples danced to the music of the Tommy Dorsey Orchestra, conducted by Warren Covington, at the Military Ball held last night in Rec Hall.

Christmas Parties Planned for Orphans

Orphanage, also in Cresson, to the Nittany area for a Christmas party Blue Band to Meet Monday on Sunday afternoon, Dec 13 The program for the day will begin by bringing the orphans p.m. Monday in 117 Carnegie, in-aged 6-11, to the Nittany Union stead of 6 p.m. as previously an-Building around noon in Univer-nounced sity buses or via a car pool if the

buses cannot be obtained After the orphans arrive, they

will be given a tour around campus. After the tour they will return to the NUB where games will be organized for their bene-fit with the distribution of presents by Santa Claus. Movies may possibly be shown. Turkey dinners furnished by Ed Moran's catering services will then be served the orphans.

Following this, from approxi-mately 4 to 5 p.m., each hall unit will take two orphans and entertain them for about an hour. The orphans will then return to Cres-50h

Blair House of North Halls will Also give a Christma party for 40 orphans from the Williamsburg Home outside of Altoona on the afternoon of Dec 15.

Through the help of the Altoona Chamber of Commerce, Blair House will hold a party from 3 to 6 pm. for orphans, both boys and guls, ranging in age from 5 to 18

When the orphans arrive they will be ushered into Blair House lounge where Christmas preswill be distributed by San ta Claus and games will be held. The orphans will then be taken to a Christmas dinner held in Warnock Hall. Members of the Altoona Chamber of Commerce and commissioners from Blair County will attend the party University officials including President Eric A. Walker: Dr. Robert G. Bernreuter, special assistant to the president for student affairs: Frank J. Simes, dean of men, and Dorothy A. Lipp, dean of women, have been invit-ed to attend both parties,

U.S. Steel

all-expense paid trip to United sembly room. States Steel?

It you're a job-hunting senior, interested in doing research work, and have had a successful campus interview with a U.S. Steel repre-sentative, you will be invited to the laboratories to discuss pos-suble future employment. It is delegation to the United Na-ing at any of schools which are ing at any of schools which are located in East Orange, NJ., White Plains, N.Y. and New York City. Applications for the award may be filled out in 138 Sparks. They must be sent to the Berkelev

sible future employment.

The student who takes such a Festival Players trip will be met for breakfast

trip will be met for breakfast at his hotel by his prospective laboratory supervisor. He is then taken to the personnel office where he is given a 10-minute psychological test. The greater part of the day is spent in meeting groups of lab-tat 8 30 tonight in Schwab Audi-oratory workers doing different types of work. This gives the stu-dent a better idea of what he sold at the door at the matinee, would like to do From the dis-cussions the student has will be sold at the door at the matinee, would like to do From the dis-the value he may have for the company may be better deter-mined. Discieland Band, Sunday, Dec. 13 The state of the day is to be the sold at the door at the door at the matinee, bis company may be better deter-the value he may have for the company may be better deter-mined. mined.

Before the student leaves he **Players to Hold Tryouts** returns to the personnel office. For 'Italian Straw Hat' There he is given a detailed sum-

Campus Activities Offers Jobs To Seniors By RONA NATHANSON Fourth of a Series Do you want to "win" an By RONA NATHANSON Fourth of a Series By RONA NATHANSON Fourth of a Series Do you want to "win" an By RONA NATHANSON Fourth of a Series Fourth

O'Brien, a senior member of the \$775 and will Irish delegation to the United Na-

\$775 and will be awarded for the

School by March 12.

The Junior Interfraternity Council will meet at 7:30 pm. Monday in the Hetzel Union assembly room

The council will hear a report

Plans have been completed in the last few days by the
The last few days by the
The many of fringe benefits and such things as laboratory sponsored
Feb 12. Tryouts will be held in the framework of the framework of the clothing drive committee, on the driv

SCIENTISTS AND ENGINEERS:

THE MEN BEHIND THE HEADLINES

NAA's On-Campus Interviews

December 8, 9

EARLY EVERY DAY you read of another advance in science ..., whether it's a space vehicle streaking toward Venus or a submarine gliding beneath the polar ice.

These are the events that make headlines...but even as they are announced to the world, engineers and scientists are planning new and greater achievements -and research shows them the way.

Scientific research always has had an important role at North American Aviation. Today, research projects are underway at more than 185 laboratories in the six North American divisions They encompass the full scope of modern science.

Is air stiffer than steel?

Not all research has the headline appeal of a space ship or nuclear power. For example, research engineers at the Autonetics Division, which designs and manufactures spaceage navigation systems, found new and different ways of building rotating bearings ... and found that air is stiffer than steel for some purposes. Improved gyroscopes and magnetic

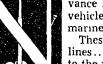
the chemistry of propellants, the physics of engine components and what happens within them, ignition of fuels, combustion of fuels, and the transfer of heat.

2.000 mph manned weapon system

The Los Angeles Division is the home of next-generation manned weapon system, the Mach 3 B-70 Valkyrie strategic bomber, and America's first manned space vehicle, the X-15. Research engineers in this division investigate manufacturing techniques, conduct studies in aerodynamics, materials and processes, and thermodynamics. They also work with physiologists, biotechnologists, biophysicists, and psychologists to solve design problems concerning human capa-bilities and limitations that arise from modern weapons and research systems.

Building better Navy aircraft

Analysis of aircraft carrier operation is a major research project at the Columbus Division. This division designed and built the Navy's T2J Buckeye jet trainer and the Navy's supersonic, all-weather A3J Vigilante. Research activities are diverse here-from how to illuminate an aircraft cockpit to developing unmanned vehicles and systems to perform within the earth's atmosphere.



2 Ag Directors Named **To Experimental Station**

Two faculty members have been named to regional posts of the Agricultural Experiment Station section of the Association of Land Grant Colleges and State Universities.

Dr M. A. Farrell, director of the Agricultural Experiment Sta-tion at the University, was named to the legislative subcommittee, and Dr. Alex Black, assistant director of the station, was named alternate on the Committee of Nine, both for the Northcast Region.

recordings were important results of this research.

A cigarette's place in research

Even the ordinary cigarette has a role in scientific research. Scientists at the Aero-Space Laboratories, an organization within North American's Missile Division, use a burning cigarette in a still room to illustrate the difference between laminar flow and turbulence in the boundary layer, the very thin air space that lies along the outer skin of an aircraft or missile. This research is part of a program to find ways to protect missiles, satellites and space ships from burning when they re-enter the earth's atmosphere.

Toward the conquest of Space

The Rocketdyne Division has designed and built the bulk of today's operating hardware in the high-thrust rocket field. Explorer I, America's first satellite, was boosted into orbit by a Rocketdyne engine ... and three-fourths of the power for Able IV-Atlas-man's first attempt to reach toward another planet-comes from liquid-propellant engines designed and built by Rocketdyne. Researchers at Rocketdyne delve into

Developing the peaceful atom

The work at the Atomics International Division of North American is part of a large national research effort aimed at the peaceful atom. Success in the development of economical power from the atom depends on thorough knowledge in every phase of atomic power systems and their materials of construction. Atomics International research reactors are in service in Japan, Denmark, West Germany, West Berlin, and Italy.

Opportunities for college graduates

Today at North American there is outstanding opportunity for young engineers who want to share the unusual creative problems that face science. You can rapidly build a sound engineering career by working on the top-level projects now underway. Visit your placement office where you'll find all the facts about a challenging and rewarding future with North American.

