

Spaceship Heat, Drag Problems To Be Studied

Los Angeles (Science Service) — Just how much heat and drag are exerted on a spaceship, satellite or meteor by the impact of invisible particles in the thin upper atmosphere will be studied during the next three years by Dr. Eldon L. Knuth of the University of California, Los Angeles, under a \$75,800 grant by the National Science foundation.

The UCLA engineering professor's laboratory investigations into these momentum- and energy-transfer problems may help determine the body construction and flight paths of future spaceships and satellites.

To simulate the conditions of a space vehicle moving at 25,000 feet per second above an altitude of 100 miles, Dr. Knuth will shoot beams of molecules at various metal, glass, and other solid surfaces.

Electric Arc Used
Previous laboratory experiments along this line have been handicapped because of the low speed and intensity of the beams. Dr. Knuth plans to raise their energy range, using an electric arc to heat the molecules above 15,000 Fahrenheit, and a supersonic nozzle to direct the molecules and increase their intensity.

Besides its immediate practical application, Dr. Knuth's study may throw additional

MEDFORD TRIBUNE

2nd SECTION

MEDFORD, OREGON, THURSDAY, DECEMBER 3, 1959

Pages 1 - 8

Eisenhower's Goodwill Mission Calls For Strong Work by Staff, Diplomats

By STEWART HENSLEY

Washington (UPI) — President Eisenhower's gruelling good will trip to 11 European, Asian and African countries calls for some heavy home-work in the White House and fancy diplomatic foot work abroad.

The President, who was to leave late today on his unprecedented 22,370-mile journey, will meet and talk with leaders ranging from staunchest long-time anti-Communist allies to tightrope-walking neutralists still trying to stay out of either "cold war" camp.

He has prepared himself for his tricky diplomatic mission by studying a series of briefing papers prepared by State Department experts on the areas he will visit.

The principal reasons for light on what happens chemically when molecules collide with other molecules.

Taking part in the project also will be Dr. Andrew Charwat, associate professor of engineering, and several graduate students.

the presidential trip lie at opposite ends of the tour — India and Paris.

Eisenhower long has wanted to visit India, where the government is trying to prove that democracy can do more than communism to raise the living standards of the depressed masses of Asia. The United States has poured

Exposure Affects Sex of Paramonium

Bloomington, Ind. (Science Service) — Continuous exposure to light or to complete darkness causes tiny, one-celled paramonium to lose its sex-changing characteristics.

Artificial daylight "stretching" postpones the regular change in mating type of one species of paramonium, Audrey Barnett of Indiana university here reported. For each four-hour lengthening in exposure to light, the paramonium changes sex two and one-half hours later. The study may help explain the sensitivity to light of more complex creatures, such as birds.

more than \$2 million in aid into India in the past 10 years to bolster that country in its race with Red China for economic supremacy.

The President's visit to India comes at an opportune psychological moment. Prime Minister Jawaharlal Nehru, erstwhile apologist for Red China, finally has become disgusted and dismayed at Red tactics. The tide of public sentiment in Southeast Asia is turning against China after its savage repression of the Tibetan revolt and the use of force on the Indian border.

A Supreme Effort
Eisenhower will carefully avoid anything approaching a "we told you so" attitude. He will promise Nehru continued U.S. economic and moral sup-

port in the continuing battle against disease and poverty.

In Paris, Eisenhower will meet Dec. 19 with the British, French and West German leaders to prepare for next year's summit conference with Russia. He hopes to solidify the Allies on a program which may force Soviet Premier Nikita S. Khrushchev into some worthwhile agreements on disarmament and Berlin. The President has dedicated his last year in office to a supreme effort to lower world tensions. The road to his success or failure begins at Paris.

Eisenhower will travel 19,600 miles by plane, 270 miles by helicopter, 1,500 miles by ship and 1,000 miles by ground transportation — a total of 22,370 statute miles.



Small Worlds Around Us

By Lynn M. Watkins

This Rattlesnake—Was 'Armed to the Teeth'

An herpetologist, a friend of mine, the other day ran across a rattlesnake "armed to the teeth" with teeth! He had a double set of fangs on either side of his ugly upper jaw.

To all outside appearances this snake looked no different from any other and it was only by sheer accident that it was discovered he was doubly armed. He was a freak; perhaps a temporary freak but a freak nevertheless. How the fangs happened to grow the way they did is anyone's guess. Probably the original fangs were broken off and when the new ones grew in they grew in pairs.

Easily Replaced

Fangs in a rattlesnake's head are expendable and easily replaced. New ones will grow as often as necessary. In many instances the fangs are removed from rattlesnakes, especially if the reptile is to be handled by inexperienced persons, as a precautionary measure. At one time the poisonous reptiles displayed in some exhibits, such as carnivals and side-shows, had the fangs removed before the snakes were displayed. The awestruck audiences never realized the snakes were defanged and the handler was in no danger.

Care had to be exercised however, for the snake could re-arm itself. Under actual laboratory conditions these reptiles grow a set of fangs in a surprisingly short space of time. In Nature the snake probably would starve to death if it were fangless any length of time.

Autopsies performed on the heads of rattlesnakes reveal an entire series of embryo fangs, all in a different stage of development and all neatly lined up ready to grow

into hollow sharp needles whenever the occasion demanded. The fangs, controlled by muscles, are laid back in the snake's mouth when not in use. Each fang is protected by a sheath of fresh remaining completely covered until the time the snake opens its mouth to strike.

Use Snake Venom

Everything, they say, has a purpose, and snake venom is no exception. Medical science is discovering new uses for this deadly venom. In this respect it is no different from hundreds of other drugs and chemicals. All must be handled by trained competent doctors and scientists.

One new use for rattlesnake venom now being explored is the substitution of venom for morphine. Experimental work with rattlesnake venom is being tried in the treatment of many diseases and may some day be a potent and useful tool in the treatment of many diseases and may some day be a potent and useful tool in the treatment of afflictions, many of which are bothering human beings.

(Released by The Register and Tribune Syndicate, 1959)

Force Feeding Holds Promise for Trees

San Francisco (Science Service) — Force-feeding forest trees may turn out to be a promising method for getting better growth. H. A. Fowells, U.S. Forest Service, Washington, reported to the Society of American Foresters meeting here. While little is known about the nutrient requirements of most forest trees, he said that loblolly pine studies show they will respond to an increased supply of nutrients. Thorough examination of the growth needs of other trees was recommended.

LARRY SCHADE QUITS

Selling Out to the Bare
Walls and Empty Shelves

**SAVE
30% - 40% - 50%**

on the Entire Schade Quality Stock of
Fine Diamonds, Watches and Jewelry

Your Christmas Gift Dollars Will Do
Double Duty Now

LARRY SCHADE, Jewelers
9 So. Central

Junior Achievement Is Meeting Topic

Richards A. F. Ballou, western region representative, Junior Achievement, Inc., will be the featured speaker at several meetings which have been arranged to explore the possibility of establishing the program in this area.

Ballou will be at the Jackson County Chamber of Commerce Roundtable luncheon Monday, Dec. 7, at the Jackson hotel and is scheduled to address the Medford Rotary luncheon Tuesday, Dec. 8.

A special breakfast meeting with interested businessmen, civic officials and community leaders has also been set for

7:30 a.m. Tuesday, Dec. 8, according to Robert Balk, chairman of the chamber roundtable committee. Balk also will serve as program chairman of the breakfast meeting which will be held at the Rogue Valley Country club.

Balk stressed the importance of the breakfast meeting with Ballou as the first step in the direction of setting up a local Junior Achievement program. Those interested in attending this planning meeting, who have not already been contacted, may telephone him at SPring 2-6025 for more information.

**CHRISTMAS CARDS
GIFT WRAP
AND
RIBBONS**

Swem's BOOKS • GIFTS • RECORDS
217 EAST MAIN • MEDFORD, ORE

NEW!

**Friskies
MEAL**
A Complete Dog Food

INSTANT
TASTE
APPEAL

ANOTHER QUALITY PRODUCT FROM Carnation

Dogs can't resist New Friskies with PURE MEAT MEAL plus exclusive new flavor flakes!

Say good-bye to dog foods that just claim to look and smell like meat. Here at last is the real thing—everything a dog food should be. No synthetics... no false flavors to try to fool your dog. No artificial coloring to make you think you're really getting meat. Instead, Friskies gives your dog PURE MEAT MEAL. With all its natural flavor and aroma. All its natural meat-meal nourishment. Friskies alone gives you "flavor flakes," too. Made a secret Friskies

way, these flakes capture the flavor heart of selected corn, wheat, oats and barley! It all adds up to new mealtime magic dogs go wild for! New Friskies Meal is at your dealer's now. Treat your dog today to exciting new taste...new health with New Friskies Meal—another quality product from Carnation.

Tests proved dogs prefer New Friskies Meal as much as 17 to 1

—Scientific feeding tests conducted at Friskies' own laboratories and kennels showed that dogs preferred New Friskies Meal as much as 17 to 1 over other leading dog foods. Tests proved, too, that Friskies Meal alone provides every food value dogs are known to need. Mixes instantly; just add water.

GUARANTEE: We guarantee your dog will love New Friskies Meal—or your money back.



Look for the new packages in sizes to meet every need — at your dealer's!

NEW FRISKIES MEAL

OREGON FOOD STORES

OPEN 9 A.M. to 9 P.M.—7 DAYS A WEEK

Items Listed Below Good Through Sunday
1475 Siskiyou Blvd.—Ashland

SWIFT'S PREMIUM

BACON
1-LB. SLICED
PACKAGE **lb. 43¢**



EASTERN BONED ROLLED

PORK ROAST **lb. 47¢**

RANDY'S—4-OZ.

VEAL CUTLETS 4 for 89¢

DEMONSTRATIONS SATURDAY ONLY!

Popcorn TNT White or Yellow **2-lb. pkg. 25¢**

Eggs "AA" Large Nulade **Doz. 47¢**

Prune Juice DEL MONTE **Qt. 39¢**

Sugar SPRECKELS—Powdered or Brown **1-lb. pkg. 3 for 25¢**

Canned Milk CAPITOL **No. 1 Tall Tin 10¢**

Jello Assorted Flavors **5 for 39¢**

WASHINGTON DELICIOUS

APPLES
3 lbs. 39¢

ARIZONA WHITE

Grapefruit
8-lb. Bag 49¢

DON'T MISS THESE BIG \$1.00 BUYS!

Bisquick 40-oz. Pkg. **3 for \$1.00**

Tuna DEL MONTE—Chunk Halves **4 for \$1.00**

Pumpkin MISSION—303's **10 for \$1.00**

Tomato Juice DEL MONTE—46-oz. tin **4 for \$1.00**

Peaches DEL MONTE CLINGS—Sliced or Halves 2½'s **4 for \$1.00**

Apricots BLUE SKY—Whole, unpeeled, 2½'s **5 for \$1.00**

Green Beans DEL MONTE—303's **5 for \$1.00**

... AND FOR ADDED SAVINGS

GREEN STAMPS