

A&M aerospace engineers test parachute for NASA's X-38

By Mandi Vest
THE BATTALION

A&M researchers have completed research on the air dynamics of a parachute being tested for NASA's X-38 project. The X-38 is a safe Crew Return Vehicle (CRV) for astronauts at the International Space Station (ISS).

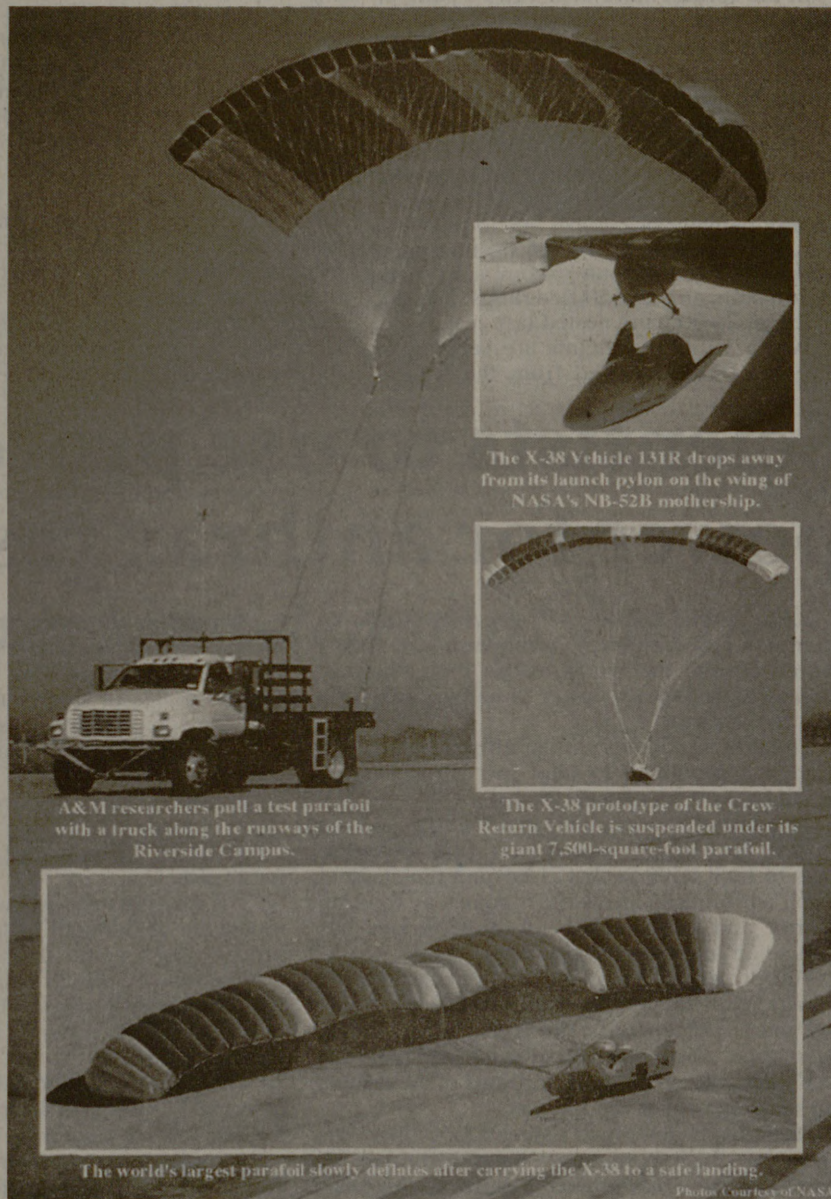
NASA contracted A&M's Department of Aerospace Engineering in 1997 to test a parachute called a parafoil to determine its air dynamics. The parafoil is a rectangular shaped parachute made with tubular inlets that allow air to pass through. It has been used in sport parachuting and hang gliding because it can be steered horizontally as it falls. NASA is interested in the parafoil to be part of the X-38 project, designed to provide astronauts on the ISS an immediate return home in case of emergency, said NASA's Website. The parafoil will allow the X-38 to slow down from a very high speed after it enters the earth's atmosphere.

The European Space Agency is helping in the X-38 project as well. Europe presently has the capabilities to carry astronauts from earth to space, but not from space to earth, said the agency's Website.

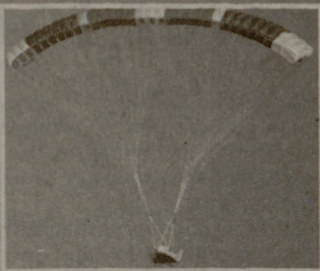
David Lund, director of the Texas Engineering Experiment Station, said the X-38 is too heavy to land like an airplane, and that it will require a large parafoil. Lund and other A&M researchers were testing many parafoils of various sizes to compile a data base of air dynamics. NASA will use the data base to design the X-38.

A&M researchers said they used a subscale model to perform experiments. They used a large truck on runways at the Riverside Campus to test the parafoil's performance at high speeds. A remote controlled aircraft with a small-scale parafoil was also used by the research team. They learned to control the parafoil horizontally by pulling the trailing edges.

If the X-38 project is completed, seven crewmen will be permitted on the ISS. The CRV that was used on the space station is the Soviet Soyuz, which can only carry three people.



The X-38 Vehicle 131R drops away from its launch pylon on the wing of NASA's NB-52B mothership.



The X-38 prototype of the Crew Return Vehicle is suspended under its giant 7,500-square-foot parafoil.



A&M researchers pull a test parafoil with a truck along the runways of the Riverside Campus.



The world's largest parafoil slowly deflates after carrying the X-38 to a safe landing. Photo Courtesy: NASA

Refuges expect budget increase

FREMONT, Calif. (AP) — Interior Secretary Gale Norton announced a proposed \$56.5 million increase Monday for the National Wildlife Refuge System, an 18 percent hike needed to cover maintenance and renovation of aging facilities.

"It certainly looks like the refuge system needs a sustained effort to improve the resources," Norton said while touring the Don Edwards San Francisco Bay National Wildlife Refuge. "It's important to take care of the land entrusted to us."

The San Francisco refuge would receive \$1.1 million under the proposed budget that starts Oct. 1.

Standing outside a visitors center overlooking salt ponds and marshes, Norton said the increase would cover maintenance and renovation of building boardwalks, trails and levees at the 538 refuges across the nation.

The proposed increase would be the largest in the past seven years. The budget this year was \$319 million.

Some Republicans and Democrats in Congress last year urged hundreds of millions more for the refuges' budget.

Norton's announcement came less than a week after she concluded that oil exploration in the Arctic National Wildlife Refuge in Alaska would not compromise America's international treaty obligations to protect the refuge's polar bears.

Since passage of the 1997 National Wildlife Refuge System Improvement Act, the budget has increased steadily. The current refuges budget is 6.4 percent larger than the previous year's \$299.7 million.

But the nation's wildlife refuges still have a backlog of maintenance projects totaling \$600 million, said Pat Foulk, spokeswoman for the U.S. Fish and Wildlife Service.

Calories, sugar can kill

WASHINGTON (AP) — The 60-year-old lung disease patient gasped for breath after certain meals. The culprit: High-calorie meals loaded with sugar.

Healthy people just breathe a little faster to excrete the carbon dioxide that is produced by eating sugar. Lungs damaged by chronic obstructive pulmonary disease cannot handle both the extra work and the new pounds.

It is one of numerous little-known diet tips that can make a big difference in easing chronic diseases that plague older Americans. Too few doctors have the time or training to deal with nutrition choices that are making their elderly patients sicker.

Now they are getting help: Dietitians have joined one of the largest primary-care physician groups to provide the first at-a-glance doctors' nutrition guide for the most common killers of elderly Americans.

Better nutrition isn't a cure, cautions Dr. Albert Barocas, a New Orleans surgeon and nutrition professor who offered the sugar-lung disease example.

The hope is that the new

nutrition guide and some easy-to-use consumer advice will ease seniors' suffering, maybe enough that some can cut back on prescription pills.

It comes at a time of increased interest in nutrition therapy. This month, Medicare began paying for registered dietitians to help treat more than 7 million seniors with diabetes or kidney disease, illnesses considered among the most influenced by diet.

Some 85 percent of seniors have at least one chronic disease that can benefit from nutritional interventions. Yet the societal, economic and physical changes of aging leave them at particular risk of malnutrition.

A spouse dies and the survivor lacks the will or know-how to cook healthy meals. Arthritis, heart disease or other ailments makes cooking a physical challenge. Alzheimer's make patients forget to eat.

And medications can sap appetite or make eating unpleasant.

Date Night

Only \$25.00 per couple

Appetizer, 2 salads, 2 entrees, & a dessert to share

CENARE

Italian Restaurant

* Only Tuesdays and Wednesdays
No coupon needed

404 University Dr.

696-7311



Petal Patch Florist

Friday Flowers

(roses, lillies, daisies, misty blues, tulips)

All Wrapped Flowers

Cash & Carry. All Major Credit Cards Accepted.

We accept Aggie Bucks.

1/2 PRICE

*Not valid Feb. 8-14, 2001

1919 Texas Ave. S
College Station • 696-6713

8:30 a.m. - 6 p.m. Monday-Friday
9 a.m. - 2 p.m. Saturday

ΦΒΛ

PHI BETA LAMBDA

Co-ed. Professional Business Fraternity

Spring Rush 2002

Wednesday, January 23rd: INFORMATIONAL
Wehner 118, 7:30 PM (Professional Dress)

Thursday, January 24th: CASINO NIGHT
Come play and win prizes!

Barbara Bush Conference Center, 7:30 - 9:30 PM

Sunday, January 27th: CAPTURE THE FLAG
Bee Creek Park (at the end of Anderson past Parkway Apts.),
7:30 PM --- Wear dark clothes & bring a flashlight!

Monday, January 28th: GUEST SPEAKER
Wehner 118, 7:30 PM (Business Casual)

Tuesday, January 29th: POOL @ P.O.E.T.S.
Come by and play pool on us! --- 7:30 - 9:30 PM

Friday, February 1st: DINNER @ FITZWILLY'S
Come on out and enjoy free dinner on us! --- 4:00 - 6:00 PM

Don't forget to come see us at the MSC Open House on the 27th!!
& Check us out on the web @ <http://wehner.tamu.edu/pbl>

Questions? Call: Kim Pinion (695-0778) or Tessa Church (693-9559).

up

January 31st

For the Bride and Groom to be...

It's time again for the Spring Bridal Section, and space is selling fast!

This is a special section that helps to inform the bride and groom in planning for marriage; from the engagement ring to honeymoon.

Deadline: January 25, 2001

Contact your Battalion Sales Representative today!
845.2696



THE BATTALION

VICTOR'S

QUALITY MENS & LADIES BOOT & SHOE REPAIR

www.seniorboots.com

Juniors order now! Delivery in April!

3601 Texas Ave.
1 mile north of campus
Hours Mon.-Fri. 8-6:30 Sat. 9-3

846-4114



Do Your Parents Bleed MAROON?

Nominate them for

PARENTS OF THE YEAR

Applications will be available at the following informationals:

Tuesday, January 22 in Rudder 507 from 4-5pm
Wednesday, January 23 in Rudder 507 from 8:30pm
Thursday, January 24 in Rudder 407 from 8:30pm

If you have any questions, please contact
Heather Augustine at 695-2416.

STUDY THE ARTS AND CIVILIZATIONS OF THE AEGEAN

PHOTOGRAPH AND SKETCH GREECE AND TURKEY



Dr. Charles White: 845-7859, cwhite@archone.tamu.edu
Professor Susan Kirchner: 845-7065, smk@texas.net

NO PREREQUISITES--OPEN TO ALL MAJORS--SIX CREDITS (HUMANITIES ELECTIVE--VISUAL ARTS REQUIREMENT)

TEXAS A&M 1ST SUMMER SESSION
MAY 21-JUNE 24, 2002