

NASA gets computer program aid

Knotty problems in the space program disappear by new computer methods developed at TAMU.

A team of computer experts is busy producing an automatic documentation system and performing research in software (programming) reliability for NASA's Goddard Space Flight Center.

This research, project manager Susan Arseven said, intends to let one know "how to tell if a computer program works." It evolved out of a need "to provide more aids to help eliminate errors in programming by trying to categorize types of mistakes that happen in programs. We're making an analysis to see if there are certain techniques and methods to use whereby the computer programmer

ends up with a more reliable product."

In 18 months the team has written over 300 programs which comprise the documentation system installed at Goddard and at TAMU.

"The system has been designed to produce timely, up-to-date documentation at a relatively low cost," Arseven explained. "It is being extended to provide the ability to monitor, improve and predict computer program reliability."

"This will be useful to all the NASA centers," she said. "All unmanned space shots are monitored at Goddard. As a result they do a tremendous amount of data collection, reduction and analysis of information received from satellites."

"Also they do the real time com-

puting for controlling trajectories and orbits for the unmanned space shots," Arseven noted. "They are the back-up computer center for the manned space flights. To support these activities, NASA spends approximately 6 per cent of their budget annually or \$200 million for computer program development."

Documentation is constructed from information gathered during all phases of development. As soon as a programmer puts in a program, the automatic system can compile it, produce a "tidy-ed" listing, a flow chart, a cross-reference, or show its connections to other programs. This information can then be used in the testing and debugging phases of development of a computer program.

Documentation is the major

means of communication in a project so it is important that documentation is timely and reflects the most current version of project information. It is kept in a central place in the computer where changes can immediately be re-documented so that the program can keep pace with the project.

"With the new system you describe what results you want, what data is needed to produce those results, and the documents you wish to produce," said Arseven. "The automated system can make sure the data is collected, monitor standards and project status and produce the needed documents."

Principal investigator is Dr. Dick Simmons of the TAMU Data Processing Center.

Preregistration to begin soon

Preregistration for the spring semester in only 13 days away.

Preregistration, open only to students currently enrolled in the fall semester, begins at 8 a.m. Monday (Dec. 2) and ends at 5 p.m. Friday (Dec. 6).

New freshmen, transfer students, new graduate students and old returning students will preregister during week of Jan. 15-17.

Students enrolled in the fall semester may obtain registration card packets from the head of their department. Heads of departments will be notified by the Registrar's Office when to pick up the packets, Carter said.

New students and students returning to TAMU after a semester's absence may let their packets from the registrar.

A student who has a physical handicap and needs help in any phase of the sign-up should contact the Registrar's Office.

Any person needing a course at a specific time or requests free time must have approval of his college dean to have the request honored.

Departmental advisers have received copies of registration guidelines. Other information or assistance can be gained by contacting Willis Ritchey at 845-7117.

Chicago kangaroo doubted

CHICAGO (AP) - In the last five weeks, more than a dozen people claimed to have seen Kinky the kangaroo, the marsupial marauder who allegedly clobbered a couple of Chicago cops.

But a disbelieving zoo official says he'll eat the animal if anyone ever finds it.

"I'm just waiting for someone to report a kangaroo being seen riding a flying saucer," laughed Saul Kitchener, assistant director of Lincoln Park Zoo, after another sighting was reported in Carmel, Ind., 150 miles southeast of here.

"I don't believe there is such a thing as a fugitive kangaroo and if one is captured and brought to me I'll eat it, even if it weighs 300 pounds," Kitchener jested.

"There isn't enough around for kangaroo to eat this time of the year — they eat grass but they also need bushes with leaves on them. It would be possible, however, for one to survive in the relatively mild autumn weather we've been having," he said.

Over the weekend, Kinky — as the elusive kangaroo has been dubbed — was reported spotted along Indiana 234 near Carmel, an Indianapolis suburb. One man telephoned police that the animal was a big one and was sitting on its haunches. A woman later said she saw a kangaroo hop into some woods.

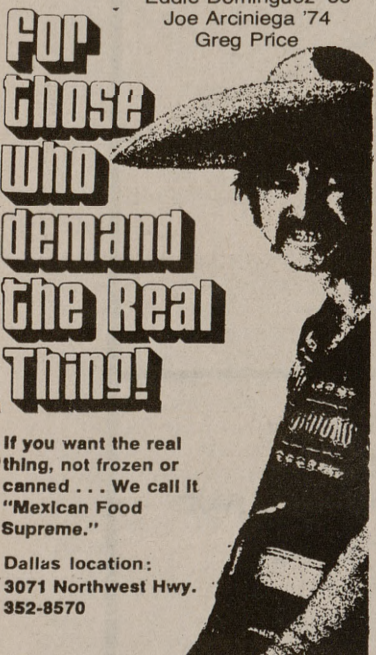
A helicopter hunt was futile. A kangaroo was reported a week ago around Rensselaer, Ind., where the Chicago Bears football team trains in the summer. This brought chuckles that it belonged to the Bears who were going to use it as a secret weapon.

But it was no laughing matter for a couple of Chicago policemen who were the first to report a kangaroo at large on Oct. 13. They displayed bruises and said they were attacked trying to catch the animal.

Since then Kinky has been reported seen around Chicago forest preserves hopping over fences and ducking into thickets, on residential streets where he disappears in the dusk and rattling garbage can lids in alleys.

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