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■ Computers as Judge and Jury

Artificial-intelligence (AI) programs may one day act as both judge and jury in a trial, say researchers at the New York University School of Law.

An AI program running on a series of supercomputers could act as "an interactive library of all statutory, regulatory, and case law," according to Joseph Bonuso, a research fellow and founding director of the school's experimental SOLOMON Project.

Using a program such as SOLOMON, says Bonuso, attorneys would input all admissible evidence under the supervision of a judge. The judge would rule on the admissibility of evidence, but would not otherwise be involved in the proceedings.

The program would receive witness testimony through voice-recognition software, then use fuzzy logic and data from voice-stress analysis and polygraph telemetry to evaluate the testimony. Correlating all data, the unit would then render a decision for human beings to carry out.

Source: New York University School of Law, Artificial Intelligence Research, The SOLOMON Project, 127 MacDougal Street, Box 992, New York, New York 10012. Telephone/fax 212/598-4919.

■ The Spaceworthiness of Nations

The key players in the international space race are changing, according to a new reference volume on the space industry.

Both the United States and Russia are losing ground in space-related industries due to governmental budget cuts, says Andrew Wilson, editor of *Jane's Space Directory 1995-96*. Other countries such as China, India, and Japan are taking up the slack, becoming serious competitors in fields such as remote-sensing satellites.

After reviewing the military space programs, world space centers, and launching and satellite capabilities of various countries, Wilson concludes that India is "quickly becoming a force to reckon with" and is expected to launch seven observation satellites by the year 2000. Wilson suggests that space-industry watchers should also keep an eye on China, which has consistently underbid U.S. companies—by at least 30%—for commercial rocket launches.

Source: Jane's Information Group, 1340 Braddock Place, Suite 300, Alexandria, Virginia 22314. Telephone 703/683-3700; fax 703/836-0029; e-mail info@janes.com.

■ Return of the Zeppelin?

A new generation of rigid-frame airships could soon fill the skies, says German physicist Jörg Bracher.

Synthetic materials developed during the past few decades make rigid-frame airships, or zeppelins, quite feasible, says Bracher. He and several colleagues have

already created a 125-foot-long (38-meter) prototype with a framework of polyester tubing. When inflated, the ship weighs a mere 337 pounds (156 kilograms). Bracher proposes using a natural-gas engine for propulsion, dubbing the environmentally friendly airship an "eco-zeppelin."

Bracher believes that this new ship could be used to shuttle people over relatively short distances, as well as having applications for tourism and environmental research. He also points to advantages in safety: An engine failure would cause a helicopter to crash, while an eco-zeppelin would stay aloft.

Source: *The Week in Germany* (October 6, 1995), German Information Center, 950 Third Avenue, New York, New York 10022. Telephone 212/888-9840; e-mail gicl@ix.netcom.com.

■ Sea Lions Have Less DDT

DDT contamination has dramatically declined in the sea lion population off the coast of California, according to researchers from the University of California.

Researchers say that biological samples taken between 1988 and 1992 show that the sea lions carried only 5.2 parts per million (ppm) of DDT and its main byproduct, DDE, compared with levels of 760 ppm recorded in 1970 (about a quarter-pound of DDT in each animal's body).

Curbing the disposal of DDT in California waters has contributed to this decrease, but researchers warn that even these low amounts may still affect the sea lion population. Marine biologist Burney Le Boeuf cautions that, though conditions off California have improved, scientists still don't know about the possible long-term effects of DDT and other substances.

Source: University of California, Public Information Office, Santa Cruz, California 95064. Telephone 408/459-2495; fax 408/459-3412.

■ Virtual Drunk Driving

Students can now experience what it's like to drive drunk without actually being intoxicated. A specially modified car simulates the slower reflexes of a drunk driver; steering in the car is harder to control, and the brakes don't react as quickly as normal, according to *School Board News*.

Students from Farmington North High School in Michigan tested the "virtual drunk driving" cars, convincing school officials that this teaching method is probably more effective than simple lectures on subject. "With experiential learning, the retention rate is 75%, much better than talk or printed words," says Kathy Kalapos, Farmington North's assistant principal.

Source: *School Board News* (August 22, 1995), National School Board Association, 1680 Duke Street, Alexandria, Virginia 22314. Telephone 703/838-6722; fax 703/548-5560; e-mail eashford@tmn.com.