

The Californian

TECHNOLOGICAL ACHIEVEMENTS Farming's fate lies in GPS

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**New system makes
plowing straight
lines a breeze**

By Jim Albanese
The Californian

The future of farming kicked up dust in a field near Chualar Thursday.

Two tractors, outfitted with global positioning satellite technology, plowed rows as straight as laser beams at IntegriNautics AF5000 Autofarm System's field day on Old Stage Road.

Dozens of Salinas Valley farmers got to ride along in the tractor cab to see how one of farming's more difficult chores had been forever changed.

"You can take an ordinary driver and make him an exceptional oper-

operator." Said Lars Leckie, an engineer with IntegriNautics of Menlo Park, host of the event along with Pringle Tractor on Spence Road.

Tractors can plow with precision but they still need a human to turn them at the end of a row.

An enthusiastic backer of the new technology is Salinas-based agricultural engineer John Inman, who calls GPS-driven agriculture "look-Ma-no-hands" farming.

"This is just fantastic," he said while watching Thursday's demonstration. "The potential productivity gains are enormous. It opens up all kinds of possibilities."

Inman marveled as he watched one of the tractors "listing", or building crop beds, in a field. "Your best tractor drivers are listers," Inman said, "because everything else you do depends on how well and straight you've listed your field. It's critical."

Listers need sharp eyes to watch their landmarks and cool nerves keep their rows straight, Inman said.

GPS-guided tractors are preprogrammed to plow straight and true, and a triangulated sate-

llite signal keeps them going straight, he said, making the task of operating a tractor much less stressful on the driver.

"Our system takes about two or three hours to install and a day of training," Leckie said.

Inman said the cost of retrofitting a standard tractor with the new equipment is about \$38,500.

"They don't come from the factory this way," he said. "Right now it's all retrofit. As more people start using this technology, they'll come up with even more creative ways to use it," Inman said.

"Drivers are going to get a lot more done with this technology," Leckie said.

"They don't need markers so they can work at night. They won't be as tired or stressed, so the quality of their jobs will improve."



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Mike Eglington, a principal engineer with IntegriNautics, demonstrates a Global Positioning System self-guided tractor on a field off Old Stage Road.