## **Tractor cabs get Smart consoles**

By ERIC MCMULLIN

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As precision ag goes mainstream, manufacturers are making it easier to make the transition.

"In the early days, it wasn't uncommon to see four or five consoles in a guy's tractor cab," says Mike Gomes, president of PFE Inc., a Woodland-based purveyor of precision ag equipment and advice. "Now, a lot of guys are achieving variable-rate spraying by simply adding a rate controller to the GPS on their yield monitor console."

At the World Ag Expo in February, all the talk was of "smart" consoles utilizing CAN-Bus technology.

## **Ride gets cheaper**

CAN stands for Controlled Automated Network. Bus is a computer term for a communications highway. CAN-Bus mean that your computerized field map and GPS location sensor are all connected in your rate controller. It also means you have nodes for additional sensors once those are needed or, in some cases, invented.

"CAN-Bus is becoming really popular," reports Marlin Melander, regional sales manager for Raven Industries. "We expect that within a year, a third of our rate controllers sold will be CAN-Bus, and in two years just about everyone will buy CAN-Bus."

Rate controllers maintain a steady rate of active ingredient by compensating for changes in ground speed. Raven will continue to sell its standard rate controllers, which start at \$1,885. CAN-Bus systems start at \$4,800 while a complete variable-rate control system with a Raven Viper and GPS lists at \$8,500, says Melander. Adding variable-rate to an existing Raven controller is \$5,400.

That's a far cry from the \$20,000 it cost just a couple of years ago to add variable-rate capability to a spray rig, notes Gomes. The three leading CAN-Bus rate controllers are the Raven Viper, AgLeader Insight and Mid-Tech Legacy.

Each of the three includes the rate controller, a GPS component so that your rig knows its exact location in the field and a field map. The field map is written on your office computer – or is done for you by your custom applicator – and uploaded into the rate controller.

## **Key Points**

- For variable-rate spraying add rate controller to GPS on your yield monitor.
- CAN-Bus ties computerized field map and GPS sensor to the rate controller.
- Field map on office computer is uploaded to rate controller; add prescription and go.



**AERIAL IMAGERY** is rapidly gaining favor in California, says Britt Beene, InTime Inc. regional sales representative.

From there, you plot your field's fertilizer or Pix needs by scouting the field, soil sampling every 2.5 acres or through aerial imagery.

Then you write the prescription and load it onto the controller, and you're ready to go," explains Gomes.

Aerial imagery is rapidly gaining favor in California, reports Britt Beene, regional sales representative for InTime, Inc., a Mississippi-based company that promises a 24-hour turnaround on aerial imagery. Pictures are taken from a fixed-wing aircraft at 12,000-foot elevation.

McMullin is a Berkeley writer.