

RTK FARMING



RTK Farming Ltd (from left to right): Mark Leaman (NIAB, which intends to become a shareholder); Andrew Crossley, Trumpington Farming Company; Michael Sapsed, Manor Farm, Croydon; Edward Banks, Thomas Banks & Partners; David White; Chris Ascroft, farms manager, Wilbraham Farms.

A group of south Cambridgeshire farmers have formed a company to provide an RTK network for the area. Ian Marshall reports

Repeatable accuracy at an affordable price. Those are the main objectives of RTK Farming Ltd, a new company set up by five East Anglia farmers who between them farm some 10,000 acres in the region, cropping split primarily between combinable crops and sugar beet. Bayer and NIAB are also involved in the project. The former is a sponsor and is also providing a mast site, as has NIAB.

Explaining the aims to a group of around 120 interested farmers, David White, who farms at Little Wilbraham, said that RTK Farming Ltd has been set up to bid for East of England Development Association (EEDA) grant aid, with the intention to develop an RTK standard GPS signal network to cover the south Cambridgeshire area and reaching into surrounding counties.

“Our aim is to provide an affordable signal to enable farms of any size to benefit from precision farming techniques on their farm,” he said. “The network consists of six base stations in year one to cover an area of 70,000ha to enable more than 70 farms to have access to precision farming technology which would otherwise be unaffordable, with the establishment of a further six stations in year two, to take the area up to 160,000ha of arable cropping. The concept has been approved by EEDA and RTK Farming Ltd is in the process of putting forward a business plan.

“The purpose of this meeting is to

inform interested farms of the intentions of RTK Farming Ltd to set up an RTK network, to inform them of the available signal subscription service and recruit farmers to take part in pre- and post-RTK measuring and benchmarking of operations on their farm.”

Timing and subscription

As to timing and the cost structure, shareholder Edward Banks of Thomas Banks & Partners, Harlton, said that it is the intention that the network comes on stream for this autumn’s drilling and that subscribers will pay £500/unit/year for the RTK Farming signal up to three receivers, with a flat fee of £2000/year for four or more. There is also an initial, one-off, £200 set-up and administration fee. This compared to the £1300/year subscription the company was currently paying for the Omnistar signal for each of the three units currently used on the farm.

The receivers are transferred between the farm’s front line Case IH tractors, a Quadtrac, a Magnum 320 and a Puma 195, and a MXU 135. They are also used on the Axial Flow 9120 combine, which is fitted with a 35ft header, and a John Deere 6900 tractor. “And,” he pointed out, “the RTK signal gives us down to 2cm accuracy; the repeatability of the signal will enable us to practice controlled traffic farming. It also means we can maintain that accuracy over large distances without the need for repeaters or mobile base stations.”

Chris Ascroft, farms manager for

Wilbraham Farms, which does not yet practice precision farming, said that the farms will move straight onto RTK this autumn, ploughing on-land and drilling with its MF7495 fitted with the Trimble AutoPilot system. “Auto-guidance has identified that our average tramline width is 23.5m instead of 24m,” he said. “RTK accuracy will mean that in a block with 60 sets of tramlines there will be 30m that we won’t have to work. Precision farming applications will be increased as machinery is replaced. The next sprayer will have autoboom shut-off, which will enable us to minimise the over-lap with the spray and liquid fertiliser. HGCA figures indicate that the savings on seed and fertiliser can be up to £19/ha.”

The base stations and machine-mounted equipment is being provided by Trimble. “We believe that Trimble provide the best value as their equipment can be fitted to most makes of tractors and combines,” Edward Banks said. Depending on the level of equipment, it costs around £11,500 to upgrade an auto-steer ready tractor to receive an RTK signal, said Will Mumford of Trimble distributors AS Communications.

He explained that to ensure that the network is robust and that there is no problem with the signal, critically, each base station is surveyed in to a known reference point and has a 12hr back-up battery. In a full back-up service each base station will be checked annually. “There is provision for 19 repeater stations in the EEDA funding,” concluded David White, “to ensure that we can fulfil our aim of providing subscribers with the most consistent RTK signal with the best coverage, for less.”

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