

# THE AB LINE

The indepth magazine from RVT Precision Farming

Edition 2  
Autumn/Winter 2017



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# Welcome

Welcome to RVT's latest edition of the 'AB Line' – keeping you up to date with all the latest developments in Precision Farming technology.

Our team have been busy in the field with our demo T670i combine which has performed well in all conditions when the weather was kind enough to stop raining in August!

The combine's performance in all crops proved to be very efficient. Our customers commented how good the sample was on the base settings without fine tuning. The RTK on the combine has proved to be a real eye opener for those operators still using DGPS corrections, with its speed and accuracy. This has enabled us to produce centimetre perfect yield maps to go with each demonstration.

We hope you enjoy reading the second edition of our magazine & you pick up some useful tips and gain insight as to what we can offer your business.

*Chris, Tommy and Carl*  
RVT Precision Farming Team

## New Team Member

Back in January we welcomed Carl Atkins to the RVT Precision Farming team. Carl secured his roots in agriculture and machinery from a young age. After many weekends working at local farms, Carl studied Land Based Engineering at Rodbaston College in

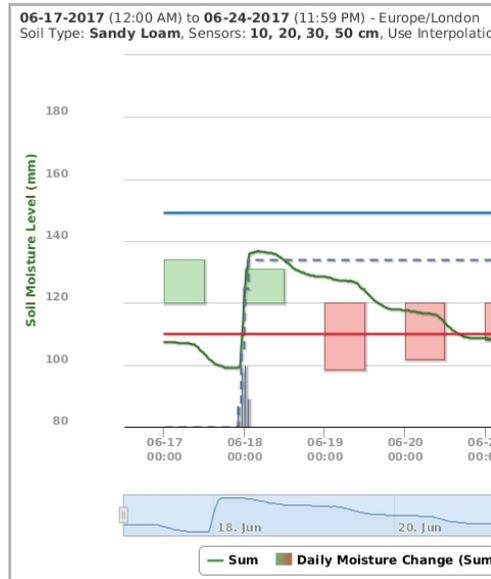
Staffordshire. A National Diploma and Foundation Degree at Reaseheath College then followed on whilst working as an agricultural engineer for a nearby New Holland dealership.



During this time he became interested in the technology aspect of modern machinery, which in turn led to a career within the Precision Farming sector. As this sector grew, he took the lead on all related GPS products for the dealership and developed this side of the business.

As a qualified Trimble technician Carl continues to support existing CNH systems through RVT and carries out technical installations and support for our other products and services.

You can contact Carl on 07375 088425 or [carlatkins@reavalleytractors.com](mailto:carlatkins@reavalleytractors.com)



## FIELD CONNECT

We have supplied Field Connect systems this year on a hired and supported basis which is working well for many of our customers. Customers have direct access to the information alongside RVT and we are able to send reports on a regular basis. Growers can then make their own agronomy decisions based on the results provided.

Some examples of the data collected are shown in the graph below.



We can actively track soil moisture in real time analysing how efficient water is being utilised. We can also see how much moisture the plants are using on a daily basis and when an irrigation event occurred.



## New Updates

The system aid irrigations requirements, improves end product quality and satisfies contract requirements of produce buyers.

## MY JOBS CONNECT

John Deere have created a new app which helps to manage work within your team. By scheduling all jobs from the office (Jobs in Operations Centre) or on the go (MyJobsManager app), the manager can always keep his drivers updated with the latest set of instructions. A job is simply a complete list of all tasks with all the necessary instructions to execute the job accurately.



The operator always holds all necessary information by accessing the MyJobs app. Jobs can be started immediately by looking at the jobs details and all job information is always synchronized with the MyJobsManager app. The user will not miss a change to his jobs

# John Deere

list for example a change in job priority, or change of fields because of weather conditions.

As managers always need to track the individual status of their operators, the synchronization of the two app's allows an instant overview about all planned, ongoing, and completed jobs. This way, new job requests can easily be handled and timing commitments are more precise. The same synchronization is also happening with the Jobs View in the Operations Centre. This view keeps the contractor (or farm manager) on the latest set of information when planning from the office on a desktop computer.

***MyJobsConnect reduces phone calls minimises miscommunication and increases efficiency.***

## John Deere Teaser!

There are some exciting new updates due from John Deere in the coming months including MyJohnDeere.com, Harvest Lab and new screens. We look forward to sharing more details with you in the next edition of the AB Line!

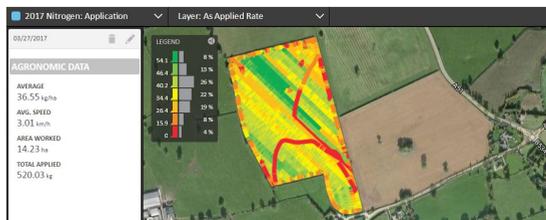


JOHN DEERE

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## iMANURE

Following on from RVT selling the UK's first iManure sensing outfit, we have seen some interesting results. iManure changes how you look at the value and use of manure and allows you to use it as accurately as bagged fertilizer - treating it as a commodity rather than a waste product.



The map above depicts a flat rate application of a cattle slurry and digestate mix applied with an umbilical system. The variation clearly showing the varying nitrogen content. The system could also be configured to apply set nitrogen units where it would have varied the volume automatically to apply the correct rate and consistent rate of nitrogen.



This map from the same field shows P variability in the same application.

## GEN 4

With the release of 17-2 software, added features and improvements have been introduced to add extra functionality to new and existing 4600 and 4100 tractor displays.

One of the biggest requests amongst Gen 4 users was a new boundary

creation feature similar to that of the 2630 display.

Released in August, you can now record a boundary independently of needing to set the recording trigger. Furthermore we can create a guidance track from the boundary, which can be used in two ways;

1. If you wanted to drive a set distance from the boundary around the field you can create a guidance track to allow this, using the adaptive curve principle.
2. Secondly you can now create an AB line from the boundary - just pick which side you want to use and a line will be generated from it.

The iTec tractor feature can now be turned to Autolearn. The system will learn every action that the operator takes. When the same patterns of actions are found, Autolearn creates a new sequence with these actions and recommends that it be assigned to an iTec button for use.

A new Wireless Setting App allows your machine to connect to a wireless network. When connected to a wireless internet connection it can be used with DataSync to send files to John Deere Operations Centre.

With the updated ISOBUS Fileserver, ISOBUS controllers are able to offload extra data onto the Gen 4 display to support the operator with implement setup, for example fertiliser configuration.

## Keep Connected

### JD Link Access

**We are pleased to inform you that JD Link Access including Remote Display Access is now free to users for up to 5 years.** For a simple £35 reactivation fee, expired machines can be reconnected. Machines with a current active subscription can be extended. Please contact us to get connected!



**NEW**

**AGRI SYNC**  
New product  
for 2017!



We have now released a new remote support app designed to help give the most efficient support throughout the year.

If you have an issue or forget how to use some part of your precision farming equipment you can quickly log a message. This could be a voice, video or text message and will be instantly visible to one of our team members. From there we can either start a video call with you to resolve the issue or quickly message you back with an answer.

## All Colours

As more and more farmers become more reliant on precision farming we believe this will help provide the best support possible. Agri Sync is included in our yearly support plan and will be rolled out within the coming weeks.

Users are encouraged to take advantage of our annual basic Precision Farming package. It includes Greenstar and guidance software updates, telephone support and access to RVT Agri Sync for just £199 per year.

### Combine ATU's

We have had a busy harvest season fitting John Deere guidance to many different makes, models and ages of combines. This is a popular cost effective method of getting guidance and even yield mapping on to a combine where the customer has existing guidance equipment to be made use of.



## Trimble Support

Carl continues to develop his role within the team and supporting customers old and new. He is a qualified Trimble/PLM Support technician and continues to support customers with these products alongside our John Deere and AgLeader offerings. Please give Carl a call on 07375 088425 to discuss your requirements.

## Kuhn Electronics

You may have read in the press recently that RVT have taken on the Kuhn franchise at all four of our depots.

We are very pleased to have this franchise and Kuhn



Electronics will work closely with our Precision Farming team to ensure customers have access to the latest technology and support for new and existing customers. Some of the features made available with the latest Kuhn software include - split screen with a 2630 display, wireless transfer of machine settings and the ability to independently vary the rate on the left and right of the spreader, especially useful with variable rate applications.

## Essential Harvest Lab Service & Maintenance

For accurate results it is imperative that each NIR sensor receives the latest software updates. These updates use information gathered from many thousands of samples so it accurately reflects current crop conditions. Alongside

this it is important that the sensor is black and white referenced using specialised dealer tools. Please contact the team for more details and price.

## Connected Machines

During the last 12 months RVT have delivered many Connected Machines. A Connected Machine is a new machine encasing the latest technology products. John Deere subsidise the dealer £850 to support the customer with the use of their Connected Machine to ensure optimisation of the precision farming equipment and ensuring essential updates are carried out in the first year of ownership. This subsidy covers the dealers costs in the first year of ownership, but we recommend this is extended for further years. Please talk to us about extending these services.

## RVK RTK Expands

In response to demand we have increased the area for our RVT RTK network to include Lancashire and North Cheshire. A number of customers are already benefiting from the extended centrally located network.

# Machine Sync

*RVT RTK correction signal provides repeatable pass to pass 2cm accuracy without experiencing any of the line drift sometimes associated with satellite based correction signals.*

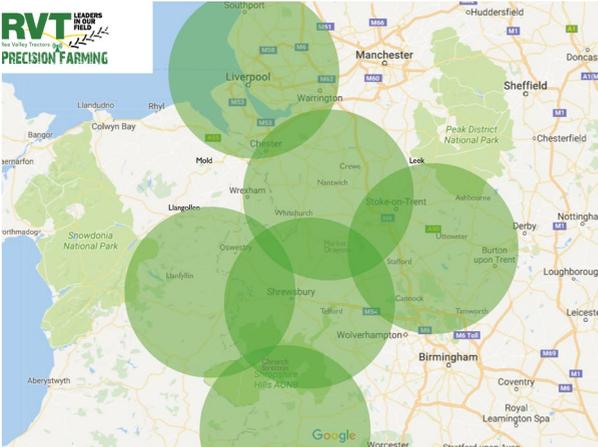


## Machine Sync in the field

John Deere's Machine Sync machine to machine communication system has been in operation during the 2017 cereal harvest with RVT customers.

Designed for use with combines and tractors, Machine Sync enables machines to exchange data on-the-move to improve the efficiency of the harvesting and unloading operation, and allows the combine operator to 'guide' a tractor and trailer alongside the harvester.

During operation, the tractor driver can view a map that displays the position of the harvesters and other tractor/trailer units in the field. Depending on the level of grain in the combine's tank, Machine Sync sets



# S700 Combine

priorities for the unloading process and indicates which harvester needs to be unloaded next, when there is more than one in the field.

In turn, the combine operator can actively call a tractor and trailer to begin their approach for unloading. An additional feature enables the tractor operator to accept the unloading request, which will automatically exclude other tractor/trailer units from approaching the same combine.

Machine Sync can then allow the combine operator to take command of the tractor and grain trailer, once a predetermined distance from the combine is reached. When Machine Sync is activated, the combine operator begins to steer the tractor and trailer relative to the combine's speed and travel direction.

In addition, coverage maps and guidance lines can be shared between machines using the Machine Sync Shared Data option, which can be achieved using MCR or John Deere's JDLink modular telematics gateway (MTG) controller.

## John Deere introduces new automated combines

The most advanced grain harvesting technology from front to back is featured in the combines and headers John Deere is introducing for 2018. Four new S700 Series rotary combine models – the S770, S780, S785 and S790 offer producers significant improvements in 'smart'

technology, operator comfort and data management.



“These new S700 Series combines are the result of enhancements to our previous models that optimise and automate harvesting operations for both coarse and small grains,” says John Deere's European combines product manager Carsten Heftrig. “We've increased the overall intelligence of these combines by automating more adjustments and calibration tasks. We've also improved the lifetime durability and productivity of our front-end equipment to create





a high performance harvesting solution unlike any

other on the market today.”

To make it easier for operators to maximise the performance of these new combines, John Deere has introduced the next generation of automation, Integrated Combine Adjustment (ICA2). After optimising machine settings such as throughput, grain quality and losses, and cleanliness of the sample using ICA, the ICA2 system – which is part of the range’s new Combine Advisor package – changes both the threshing and cleaning system settings automatically to maintain the pre-selected output at a consistent level, whatever the harvesting conditions.



## 4600 Display

Also within the Combine Advisor package, two ActiveVision cameras give the operator a view into the tailings and clean grain elevators via the cab display. The system constantly analyses



this information from the cameras along with the loss sensors to maintain optimal threshing, separating and cleaning performance based on the operator set targets.

Three weigh cells inside the grain tank automatically measure the change in weight as the tank fills. The system compares this measurement with those of the mass flow and moisture sensors to calibrate the yield data constantly. It is also designed to compensate for shifting grain when harvesting on slopes or if the combine stops.

The yield data is displayed on the GreenStar 4600 display and can be wirelessly transferred to the Operations Centre in MyJohnDeere.com. From here it can be downloaded into the farm management system and used to create a prescription map for the next job to be carried out in the field.

# Recent Work



Inter-row bedding of young rose plants using Active Implement Guidance, previously sown with the same technology.



Applying liquid fertiliser whilst planting potatoes with Greenstar Rate Controller.



Destoning organic potato beds with Active Implement Guidance.



RVT RTK Greenstar conversion of a new MF tractor shown destoning and bedforming in one pass



One of the many CNH Greenstar conversions we have done on steer-ready New Holland's and Case Puma's

At RVT every new machine installation will include initial operator training.

Alongside installation training we have a range of training courses available as refreshers or for new staff members, meaning that we are always there to help you get the most from your investment.

### - Guidance for Beginners

The whole range of Greenstar displays will be covered for complete beginners.

### - SF 2630/2600 Overview

A more in depth look at the functionality of these displays. (Candidates would be expected to have a knowledge of basic guidance).

### - SF 4600/4100 Overview

A more in depth look at the functionality of these displays. (Candidates would be expected to have a knowledge of basic guidance).

### - StarFire receivers

Get the most out of your StarFire ITC, SF3000 or SF6000 receiver, know the differences, accuracy and set-up options.

### - Yield Mapping

Learn how to achieve accurate usable maps from your John Deere combine or Self Propelled Forage Harvester, including display set up, yield monitor calibration and export of data.

### - Section Control & Variable Rate

Learn how get the most out of section control enabled displays, work with prescription maps and obtain accurate as applied maps.

### - Field Connect

Learn how to install and set up John Deere moisture probes for accurate results. Learn how to access accurate and timely data for your own benefit.

### - Software Update

Learn how to obtain and update your own Greenstar software, 1800, 2600, 2630, 4100, 4600 & StarFire receivers covered.

# Training Courses

## MyJohnDeere Operations Centre

Learn how to store, modify and work with your own collected data in the My John Deere Operations Centre. The course covers fields, boundaries, guidance lines, yield, application & prescription maps, machines, data sharing with your agronomist & more.

## ITEC & ITEC-Pro

Learn how to use and set up the Headland Management System on your tractor and use I-TEC Pro for automated headland turns.

## Course Fees

All courses cost £75/person and will be approximately 3 hours. This duration will not be limited in the event that more time is required.

Certificates of attendance will be supplied to employers to satisfy legislation requiring employers to suitably train staff in the correct and safe use of their equipment.



**RVT** LEADERS  
IN OUR  
FIELD  
Rea Valley Tractors  
**PRECISION FARMING**



Have you seen our latest videos on YouTube?  
Search for our channel - Reavalleytractors

*Interested in  
Precision Farming?*

We'd be interested to hear  
from anyone looking to  
pursue a career in this  
sector to join the team  
at RVT. For more details  
please call:  
Chris on 07805 871984

**NSTS Spreader, Sprayer and Pelleter Testing**

available at all four depots.

Get your machine ready for Spring!

Book in advance to help us plan &

**SAVE 10%** off the test price

(bookings must be made before 31st January 2018)



## USED EQUIPMENT FOR SALE

11010374



**MUELLER 1200 DISPLAY & DGPS RECEIVER** camera & section contl, runs 2 isobus implements  
T: 01743 289100. £5,500

11012124



**TRIMBLE 522 RADIO MOBILE BASE STATION**, Can be used as in-field RTK or fixed station for radio or NTRIP ..£5,000

11011090



**AGLEADER INTEGRA** Isobus display, c/w section control & Norac unlocks. Little use, 3 months warranty £2,500



**DUE IN SOON** Used 1800 Greenstar Display c/w SF300 Egnos receiver.  
.....Call for details

**RVT**

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