



### AN-105 Quick Data Security and Integrity in the Elite Voyager System

#### ***In Brief***

The Elite System is used to show the movement of staff. As such, it is vital that the information is both accurate and free from tampering.

From inception, the Elite System has been designed with these objectives in mind.

#### ***In Detail***

There are many steps in the process from collection of data through to reporting that data security and integrity are involved with.

1. For XL Data Wands at data collection, data is verified by a number of methods that ensures error free data collection.
2. Elite Voyager Radio system uses even more error checking in logging of data due to the nature of radio frequency transmission and possible interruption of signals.
3. Data extraction from Wands into XL Unloaders has proven itself since 1997 to be both a simple and extremely safe means of data extraction.
4. Data extraction via radio into the automated extraction tool “Mesh Unloader” also includes many proprietary checks on the data to ensure it is true and correct.
5. All recording instruments implement “write-verify” memory logging ensuring that data is correctly recorded.
6. In the PC, every line of data recorded in the raw data files has its own data integrity check. If anything changes then it will not match its integrity check and the data cannot be used. Similarly, this prevents data from being used if it has been edited or changed by anyone.

The Elite System includes tests on data at all places within the system.

Additionally it includes auditing information and tools are provided to test and report on the quality of the data.

***Overall and fundamentally – data is protected and locked so that what is reported is what happened.***