# Detector Field Test

## Viking VK40 Part II

### David Drummond

n the first part of this Field Test (Treasure Hunting March 2005) I only managed to detail my initial impressions of the Viking VK 40. This was because I had only limited time to put together a report, and - as is often the case in Scotland - the weather was somewhat against me. I therefore asked if I could do a follow-up as I especially wanted to see how the Viking VK 40 would handle on beaches.

My original trials, just before Christmas, were carried out on a fairly run-of-the-mill stubble field that I had searched many times over the years.

The VK 40 did manage to find a number of objects that we had missed on previous occasions. I was impressed, but wondered whether this was simply to do with the farmer ploughing slightly deeper than normal. This was because when I had been searching the site on previous occasions we had recovered - along with some more unusual finds - a lot of material that was apparently associated with the dumping of "town dung". However, from recent aerial photography and archaeological sources, the farmer had informed us that some of our finds were more likely to be associated with a building that had stood directly in front of his house and in the very field that we were now searching.

The farmer believes that this may have been a Roman granary store; but, having conducted some research myself, I have come to the conclusion that it was probably a

"souterrain" or earth house.

Earth houses are fairly common in my part of the country, but are normally considered to be of the Bronze Åge or earlier periods. However, some excavations of them have recovered Roman artefacts such as fragments of pottery or glass. But, in itself, this doesn't point to them having been used by the Roman Army. On the other hand this doesn't rule them out as having been used by Roman soldiers as temporary shelters or marching camps (of which there are a number of traces of such in my area).

The trouble with this field is that there are two natural humps in the terrain, forming a feature of saddle shape, and this would have given some shelter from the winds - perhaps even for an early settlement.

Throughout the years I have been searching this site I have never found anything in the form of Roman artefacts or any objects that looked to originate from the Bronze Age period. In fact, the earliest finds only appeared to date late 17th or 18th century.

One thing I have noticed is that from time to time fragments of giant stone slabs have come to the surface that that farmer has had to manhandle to the side of the field. I have often wondered whether there had once been a prehistoric or Bronze Age settlement in the area and, if the people buried their dead in stone cists, whether ploughing had broken them up and scattered their remains over the fields.

In my searches I have also picked up pieces of pot shards of white gritty form that look to be medieval or earlier in origin; however, I have found nothing in the form of associated metal artefacts that could help date the pot-

On another occasion I was surprised to find a human tooth on the field's surface. I have no way of telling how old this is, but I have kept it in my collection.

#### **Older Than Georgian?**

When using the Viking VK 40 just before Christmas I came up with a number of strange objects that I encountered some problems in dating. Could these be much older than my usual Georgian finds, or is it just wishful thinking?

First on the list is a piece of thin copper alloy metal in a brooch-type shape. It shows faint traces of decoration on the front, and on the reverse there are traces of what might have been a pin. It reminds me of some Roman brooches I have seen but I am dubious of the metal alloy for this date (Fig.1a&b.).

The second find in this category is a piece of silver again showing slight traces of decoration. At one time it was a hammered and flattened circular piece and may even have been a ring brooch; however, there are no sign of where a pin may have been attached. When I dug this up it gave a good high

Fig.3a&b.







number on the VK 40's screen. Unfortunately, the find is buckled and there are no identifying markings such as a hallmark (Fig.2.).

From time to time odd coins turn up in this field. The VK 40 found two American Indian Head cents which,



Fig.4









CM

Fig.5.

СМ

Fig.7a&b.

with an earlier example, makes three to have come from this field (Fig. 3a&b.).

Another strange artefact to be recovered by a friend of mine was a length of chain made of copper alloy and with large incised links. This was shown to another friend who thought that it might be part of a sword attachment chain. I wondered about the possibility of it being a fragment of chain mail, as I had never seen a piece of chain like it (Fig. 4.).

Fig.5. shows a piece of metal with a scratch resembling a cross on it. What is odd about this find is that, although definitely metal, it has a texture that reminds me of asbestos.

Next on the list is a heavy cast metal pommel that is threaded and highly decorated. I believe it to have been made from brass and the decoration is quite exquisite (Fig.6a&b.). Again I wonder if this find could be earlier than Georgian and could have been part of a weapon such as a sword or a flintlock pistol.

My final mystery item is a fragment of heavy brass or copper alloy that looks to be part of a tool (Fig.7a&b.). But could it be something more exotic such as part of a battle mace? Another suggestion is that it is simply part of the head of a soldering iron as there are traces of a silvery substance that could be solder.

All of the above mystery items - apart from the length of chain found by a friend of mine using a Viking 5 - were found during the testing of the VK 40. The targets were indicated by easily defined high numbers showing on the screen as between 60-90, and were dug up at depths from 4in to 8in.

The search mode used was Inland setting and All-Metal (rather than standard Motion or Non-Motion modes) with a constant background threshold noise, which I have found to be person-

ally best for my sites in Scotland and my style of use.

#### **Beach Appraisal**

My beach tests of the Viking VK 40 were carried out on two types of beach: one a light shingle, and the other sand.

With the extremely stormy January of this year - experienced up and down the country - I had expected the sand to be stripped off the beaches leaving great empty gullies and coins lying everywhere on the surface. However, as I was about to find out, if you lived on the east side of the country then the severe winds were blowing in the wrong direction and more likely to be bringing in more sand than taking it off

When visiting the old harbour at Auchmithie I noticed that this was the case, for the shingle was pretty much in the same position as when I had visited the site in normal weather. If the winds had been right, as on one occasion when I made a visit after a storm, a lot of the shingle would have been stripped off and normally non-detectable finds would have been available going right back to early Georgian times.

Finds were plentiful in number but not in age, consisting in the main of fragments of molten or cut aluminium. On this particular beach the VK 40 worked well enough but seemed to be affected in the Beach mode by the mineralisation when the shingle was wet with sea water. I found that I seemed to be getting better results by switching back to the Inland All-Metal setting. But all beaches are different, and each can vary from section to section, so it is necessary to experiment to get the best performance from the make and model

of the detector that you use.

As well as the junk pieces of aluminium I was finding quite an amount of small pieces of copper and brass but - surprisingly - not the coins or fishing weights that I had half expected to find.

Auchmithie is an intriguing harbour having its associated village set high above the cliffs. There are plenty of tales about smuggling here, and its treacherous rocks have resulted in shipwrecks from all ages.

An article in the *Arbroath Herald* from the 1970s covered an incident back in the late 19th century when it was believed a wreck of medieval date gave up part of its cargo. It was said that after a storm thousands of hammered coins - some going back to the 15th century - were strewn amongst the rocks. I have always hoped that I might be able to find at least one of those lost coins after a storm, but so far I have been unlucky.

The next beach we visited was sandy and much closer to home. Whether the wind was in the wrong direction or not, I hoped that the turbulent weather would have at least stripped some of the sand off to reveal the shingle that I knew to be underneath.

Once again I was disappointed for the beach had a much bigger build-up of sand than normal, some of it being feet deep in places. Not only had the storm brought in extra sand, but there was also a lot of pollution in the form of seaweed and even tree branches. Despite these problems we conducted our search and recovered about 30 coins between us - all modern.

As stated earlier, all beaches are different, but once again I found that the Beach mode was not as sensitive as the Inland mode/All Metal, especially over

However, in my favoured search mode with constant threshold the VK 40 was quite at home on the dry sand and - despite the unfavourable conditions - I managed to find over a dozen coins in an hour's search, as well as a bunch of keys that some poor unfortunate had managed to lose.

One thing I did notice was that the VK 40 gave a poor audio response to rusty post-1982 1p and 2p coins. This is not really surprising as they are debased and have an iron core with a thin copper coating. In contact with sea water, and with the effects of electrolysis, this coating does not tend to last very long in the case of beach losses. As a result they will give a signal that tends to jump about but - as you all know by now - all "iffy" signals should be dug.

The following Sunday saw me on another beach in Fife showing a friend of mine how to work the Viking VK 40. I left him to try the detector for a while and the first good signal he received was a 1944 shilling in very good condition. Unlike our modern iron-cored



"coppers" the coin looked as if it had just been lost, and he was very pleased to have found it.

#### **Conclusions**

During testing I was impressed by the Viking VK 40's performance. I found it to have excellent discrimination abilities, and very good sensitivity that provides good in-ground depth. On the beaches I tested it on, I found the VK 40 to have limited abilities on

Fig.8. Miscellaneous finds from Auchmithie.

wet sand; however, I found it to work as well as any other detector I have tried over dry sand.

On inland sites this detector is very much at home, although its computerised discrimination read-out occasionally gave conflicting results on the screen. This seemed to be the result of the detector being fooled by large deep iron of particular shapes - targets that represent problems for most detectors.