MICHAEL JOHN SMITH

1. Smith was employed as a Senior Quality Assurance (QA) engineer and manager at GEC Hirst Research Centre from December 1985 to July 1992. During that time he had access, in the normal course of his duties, to a wide range of research and development tasks; manufacturing, assembly and test processes; and electronic components, devices and equipment.

2. As a competent QA engineer, he would be checking that all manufacturing and assembly processes were carried out correctly in accordance with the various standards, rules and regulations that would apply. Much of this information is not classified, as Dr Cundy said in his statement. He would also get to know, and need to know, the timescales and priorities of the different projects for which he was carrying out his QA tasks. He would certainly be aware which projects he dealt with were for MOD or for other UK defence contractors - The QA requirements for each project differ and it is important to know which "customer" is which. This information is normally classified, for MOD contracts, at RESTRICTED. All the information that Smith saw would, however, be GEC COMMERCIAL IN CONFIDENCE, whether or not that privacy marking was printed on documents.

3. As far as I can see, Smith's work would give him knowledge on the fine detail of precisely how a given component, device or part was manufactured and assembled. He appears to have been particularly interested in the manufacturing processes (often chemical processes) for integrated circuits (both silicon and gallium arsenide) and for bulk crystalline devices, such as bulk acoustic wave (BAW) delay lines and filters, which are widely used in radar and communications equipment.

4. The materiel, both documents and devices/hardware, found in Smith's possession bear this out. The devices are samples of particular items on which the GEC Hirst Research Centre were or had been working, and knowledge of how they were manufactured and assembled would be of considerable use to a country or company that found reliable and consistent manufacture of such devices difficult. The documents (notes, drawings, detailed explanation of process steps, etc) are all to do with the details of manufacturing processes for various devices and components; these would be useful to a country or company to enable them to make similar devices reliably and consistently. In reality, Smith was transferring technology and manufacturing know-how to his FSU contact.

5. The Rapier delay line is a case in point. The manufacturing know-how and processes for this and similar devices, widely used in radar and communications equipment, is well-established in the UK and has been so for about 20 years; the same applies to the USA and to some other countries, such as France and Japan. But the FSU may still have considerable difficulty in producing similar devices for use in their own radar and communications equipment which are as small, as rugged, and as reliable; and may not be able to do so consistently and in sufficient quantity to meet their needs. The detailed data

given on the manufacture and assembly of the Rapier delay line would therefore be very useful to the FSU in saving them money, time and resources.

6. The GEC Hirst Research Centre is a major UK electronics research and development organisation: it is not a normal manufacturing plant and any production there would be for developmental samples and initial or small batch production. Smith was therefore able to see and gather knowledge of newer, more "leading-edge" technology, processes and devices than he would have done if he had been a QA engineer at a normal electronics manufacturing plant. Clearly, this would be more valuable to his FSU contacts than more mundane manufacturing technology.

7. Overall, I assess that the information and knowledge Smith was able to pass on to his FSU contacts was of considerable commercial value to them, in improving their manufacturing technology in these areas and in saving them time and resources to catch up with the West. However, the technology was, in many cases, well-established in the UK and better or improved processes and devices were already available to the the UK for defence equipment. I would therefore assess that, in terms of national security, Smith's activities have caused some damage to the UK, but not serious damage.

7 March 1994

J F MacCulloch
DD MOD Sy(S&T)

Statement

1. I am James Francis MacCulloch.

2. I am the author of the security damage assessment dated 7 March 1994.

3. Since I completed that assessment, my attention has been drawn to the evidence given in the criminal trial by Dr M F Lewis, and I have had further discussions with Dr Lewis and Dr D Weatherley. In the light of this further consideration, the assessment dated 7 March 1994 is incomplete. I would therefore amend that statement as follows:-

a) Delete the last sentence of paragraph 7.

b) Add three new paragraphs, to read:-

"8. The details of the information and knowledge in the possession of Smith was of direct military significance, because it would allow the operating characteristics and parameters of certain UK in-service weapon systems to be inferred by Russian radar and missile experts. In particular, this is true of both the Rapier Air Defence Missile System and the ALARM airborne anti-radiation missile (ARM).

9. The specification headed "Demonstrator Programme Requirement Specification Bandpass Filter Assembly" dated 8th January 1992 gives particular concern. If this specification was specifically identified as linked to ALARM, it would allow the identification of certain key operating parameters of that weapon system, which in turn would allow an intelligent enemy to develop effective countermeasures. The fact that Dr Lewis was able from his own knowledge to link this specification to ALARM indicates that the same linkage could be made by a hostile intelligence service.

10. For these reasons, my overall assessment now is that, in terms of national security, Smith's activities have caused some considerable damage to the UK's interests, but serious damage in the case of ALARM. Some of this damage is potential, in that countermeasures to these systems could be developed, but we have no way of knowing if the Russians have or not".

J. F. MacCulloch

J F MacCulloch
DD HQ Sy(S&T)

16 May 1995

Court of Appeal (Criminal Division)

REGINA

- v -

MICHAEL JOHN SMITH

1. The Crown are satisfied that the reference to Smith on page 395 of the book "Next Stop Execution" is not correct. Gordievsky gave no information so that "MI5 were later able to arrest Michael Smith".

2. Gordievsky gave much information about Line X but none of that information enabled the Security Services to identify Michael Smith as a KGB agent.

3. We have not, and in the circumstances, do not intend to ask Gordievsky for an explanation of this passage.

4. We understand that this is not the only passage in the book in which Gordievsky exaggerates his role in such matters. For example, we are instructed in respect of the footnote on page 360 :

(i) that his account of this incident is not correct; and

(ii) that Gordievsky was in no position to know what the KGB thought since by the relevant date he had already defected.

5. No exhaustive analysis has been undertaken to identify all such passages. Such an analysis would necessarily involve extensive research and would take some weeks.

6. We have made all necessary inquiries and, notwithstanding the above, in the Crown's judgement Gordievsky remains a witness of truth.

15 May 1995