

## *Challenge 6 part B solution*

Report on the Koh I Noor Twin project   Top Secret

In fifty one we were alerted to the work of American physicists Townes, Gordon and Zeiger on stimulated emission of microwave radiation. Our spies at their Columbia labs obtained access to the notebooks describing their experiments and delivered these to our organisation in Dehli. HQ decided to mount an operation to build a test system capable of overwhelming radar transmissions.

Early calculations suggested that a more powerful beamed energy weapon could be built on the same principles if we could find a medium that would transmit heat and light with high efficiency, with properties that would allow us to raise the energy of electrons within it. Such a material could allow for a light powered system, codenamed Taschenlampe.

It was proposed that translucent materials formed from a crystal would be the ideal medium. Diamond would be best but it was recognised that obtaining gems of the right quality and size would be difficult.

At around the same time our agents in Uttar Pradesh made contact with members of the ancient cult known as the Cult of the Koh I Noor twins. The cult had long guarded the secret of a pair of precious gems of the highest quality. It was their belief that whoever possessed both diamonds would rule the world and they had worked for some time to prevent them from falling into the wrong hands. Koh I noor itself had been given to the Empress Victoria to keep it safe while the twin was held in secret in India. A faction within the cult was plotting to reunite the gems for its own purposes and we assigned agents Letzter and Herz Feuer to exploit this fact.

The Koh I Noor twins were reunited at our laboratories in Uttar Pradesh where experiments began on the construction of the new weapon system.

The diamonds worked better than we could have hoped. They transmit heat and light with supreme efficiency and our scientists believe that they can be used to build a directed energy weapon of great and terrifying power. Such a device mounted upon a battleship would form a devastating weapon that could down an aircraft or sink an aircraft carrier from a range of many miles.

Work continues on the project, though it has been disturbed by the activities of enemy agents. We are particularly concerned by the interference caused by the activities of a young English woman known as Charlie. Her collaborator Kholi has been detained at our facility in Uttar Pradesh but we have lost track of her and her colleague, the American agent Harry. It is of utmost importance that they are found and eliminated.