

## PUTTING THE IBM 1130 INTO OPERATION

It was decided that Dr JF de Beer, at the time a member of the Department of Physics, would take the lead in the computer centre that would be established. In 1967, Ms Klaasje Moraal (later Mrs Klaasje Benadie) was the first full-time employee appointed at the centre.

The IBM 1130 was delivered in July 1967 (earlier than anticipated) when Dr De Beer was abroad. The University did not own a forklift to move the heavy computer. Mr MGL Bosman from the Department of Maintenance and his team moved the computer, which was still in its packaging, from the sidewalk to the Physics building's elevator by rolling it on pipes. It was then moved to the second floor (via the elevator), where it was, again, rolled on pipes to the computer room.



**Figure 2** The University's IBM 1130 computer in 1971. The computer is in the foreground and the card reader/punch is in the background. The mechanical paper tape reader is on the far right of the photo. The identities of the two persons at the card reader are unknown. (Source: Photo collection, NWU archive)

This computer room was previously used by Statistics students and third-year Physics students for practical sessions. A few changes were made to the rooms to make them fit for use as a computer centre. A false floor was, however, not installed and the cables rested on the floor.

The computer was set up by one of IBM South Africa's computer experts, Mr Fred Macaskill, who was a PU for CHE alumnus.

The IBM 1130 computer had a memory of 32 kilobytes and a removable disk drive of 1 megabyte<sup>1</sup>. Programmes were uploaded to the computer with a punch card reader, which also functioned as a card punch. The punch card reader or mechanical paper tape reader was used for data input. The IBM 1130's operating system was stored on punched cards; a large pack of cards had to be read into the machine whenever the operating system had to be reloaded. Output was generated with a typewriter or a card punch machine. In practice, it appeared that the typewriter was unable to handle



**Figure 3** The IBM 1130's IBM 2310 hard drive. It had a capacity of 1 megabyte and a diameter of approximately 38 cm. (Source: Author's photo collection)

the workload, resulting in numerous problems. The problem was only solved when, after quite some time, a line printer was purchased.

To demonstrate the computer's capability to interested parties, two post-graduate Physics students, Mr JP Maree and Mr DJ Joubert, respectively, developed a programme that could calculate the day of the week of any date in history and one that could play noughts and crosses with the computer.

The computer was officially handed over to the University's rector, Prof HJJ Bingle, on 14 September 1967 by Mr JF Clarke, IBM South Africa's CEO. During the ceremony, the photo in Figure 4 was taken. Reports on the event appeared in *Die Wapad* of 20 September 1967<sup>11</sup> and *Die Veteraan* of Sept/Nov 1967<sup>12</sup>.



**Figure 5** The people who were involved in the initial acquisition of the IBM 1130 computer, were present at the 25-year commemoration of the partnership between IBM/ISM and the University on 24 August 1992. They are (from left to right), Prof WP Robbertse, former Dean of Natural Sciences; Mr Wiid du Toit, former IBM South Africa salesperson; Mrs Klaasje Benadie, formerly Ms Klaasje Moraal, the computer centre's first full-time staff member; Prof JF de Beer, the first Head of the Computer Centre; and Mr JF Clarke, former IBM South Africa CEO.



**Figure 4** The official handover of the IBM 1130 to the Rector of the PU for CHE, Prof HJJ Bingle, (left) by the CEO of IBM South Africa, Mr JF Clarke (second from the left). Also present on the photo are (from left to right) Ms Klaasje Moraal, Dr JF de Beer and Prof WP Robbertse.

<sup>11</sup> *Die Wapad*: Vol 23 Nr 1, p5, 20 September 1967, accessed at [http://dspace.nwu.ac.za/bitstream/handle/10394/14016/Wapad\\_d23\\_n01\\_1967.pdf?sequence=1](http://dspace.nwu.ac.za/bitstream/handle/10394/14016/Wapad_d23_n01_1967.pdf?sequence=1)

<sup>12</sup> *Die Veteraan*, p47, September/November 1967