



## Chapter 1: THE BASIC 903 COMPUTER UNIT

### 1.1 Introduction.

Physical details, environmental conditions and power supplies for the basic 903 Computer Unit are given in this chapter. Similar information for optional units and peripheral equipment available with the 903 will be given in Chapter 2 and 3 of this section which will be added at a later date.

The component parts of the basic 903 which are described in this section are as follows:-

- (i) the desk,
- (ii) the control unit,
- (iii) the paper tape punch,
- (iv) the paper tape reader,
- (v) the control teleprinter.

### 1.2 Physical Features.

#### 1.2.1 Desk.

The dimensions of the 903 desk are as follows:-

|        |        |            |
|--------|--------|------------|
| Height | 37 in. | (94 cm)    |
| Width  | 43 in. | (109.2 cm) |
| Depth  | 26 in. | (66 cm)    |

The approximate weight of the desk for any basic system is 400 lbs. This includes the weight of the electronics and basic core store module which are built into the lower part of the desk.

#### 1.2.2 Control Unit.

The control unit is placed on top of the desk. Its dimensions are as follows:-

|        |          |           |
|--------|----------|-----------|
| Height | 7 in.    | (17.8 cm) |
| Width  | 19.5 in. | (49.5 cm) |
| Depth  | 7.2 in.  | (18.2 cm) |

The weight of the control unit is approximately  
10 lbs (4.5 Kg).

## 1. 2. 3 Paper Tape Punch.

The paper tape punch for the basic 903 is housed in a soundproof box which is placed on top of the desk. The dimensions of the box are as follows:-

|        |        |           |
|--------|--------|-----------|
| Height | 13 in. | (33 cm)   |
| Width  | 10 in. | (25.4 cm) |
| Depth  | 19 in. | (48.3 cm) |

50 lbs (22.5 Kg).

The weight of punch and box is approximately

per second.

The maximum punching speed is 110 characters

## 1. 2. 4 Paper Tape Reader.

The paper tape reader for the basic 903 is mounted on top of the desk. It has the following dimensions:-

|        |          |           |
|--------|----------|-----------|
| Height | 9.75 in. | (24.8 cm) |
| Width  | 6.2 in.  | (15.6 cm) |
| Depth  | 9.25 in. | (23.5 cm) |

17 lbs (7.6 Kg).

The weight of the reader is approximately

characters per second.

The maximum speed of reading is 250

## 1. 2. 5 Control Teleprinter.

The control teleprinter is a separate unit and is mounted on its own stand. The dimensions of teleprinter plus stand are as follows:-

|        |           |           |
|--------|-----------|-----------|
| Height | 33.37 in. | (84.7 cm) |
| Width  | 18.62 in. | (47.3 cm) |
| Depth  | 18.5 in.  | (47.0 cm) |

The weight of teleprinter plus stand is approximately 60 lbs (27 Kg).

The paper tape reader and paper tape punch attached to the control teleprinter both operate at a maximum speed of 10 characters per second.

1. 3 Environmental Conditions.

The basic 903 Computer Unit operates in the following range of environmental conditions:-

Temperature 5 to 45°C  
Relative Humidity 5% to 95% without condensation.

Under these conditions external environmental control is not normally required.

1. 4 Power Supplies.

The basic 903 Computer Unit operates from a mains power supply of

230V  $\pm$  10% at 50  $\pm$  1 cycles per second.

The power consumption for each of the three basic 903 systems described in Section 1. 1 is as follows:-

|            |          |
|------------|----------|
| System (a) | 0. 5 KVA |
| System (b) | 1. 0 KVA |
| System (c) | 1. 5 KVA |