

**The State of the Art in
Printed Wiring Board Inspection**

Robert Thibadeau

CMU-RI-TR-84-25

**The Robotics Institute
Carnegie-Mellon University
Pittsburgh, Pennsylvania 15213**

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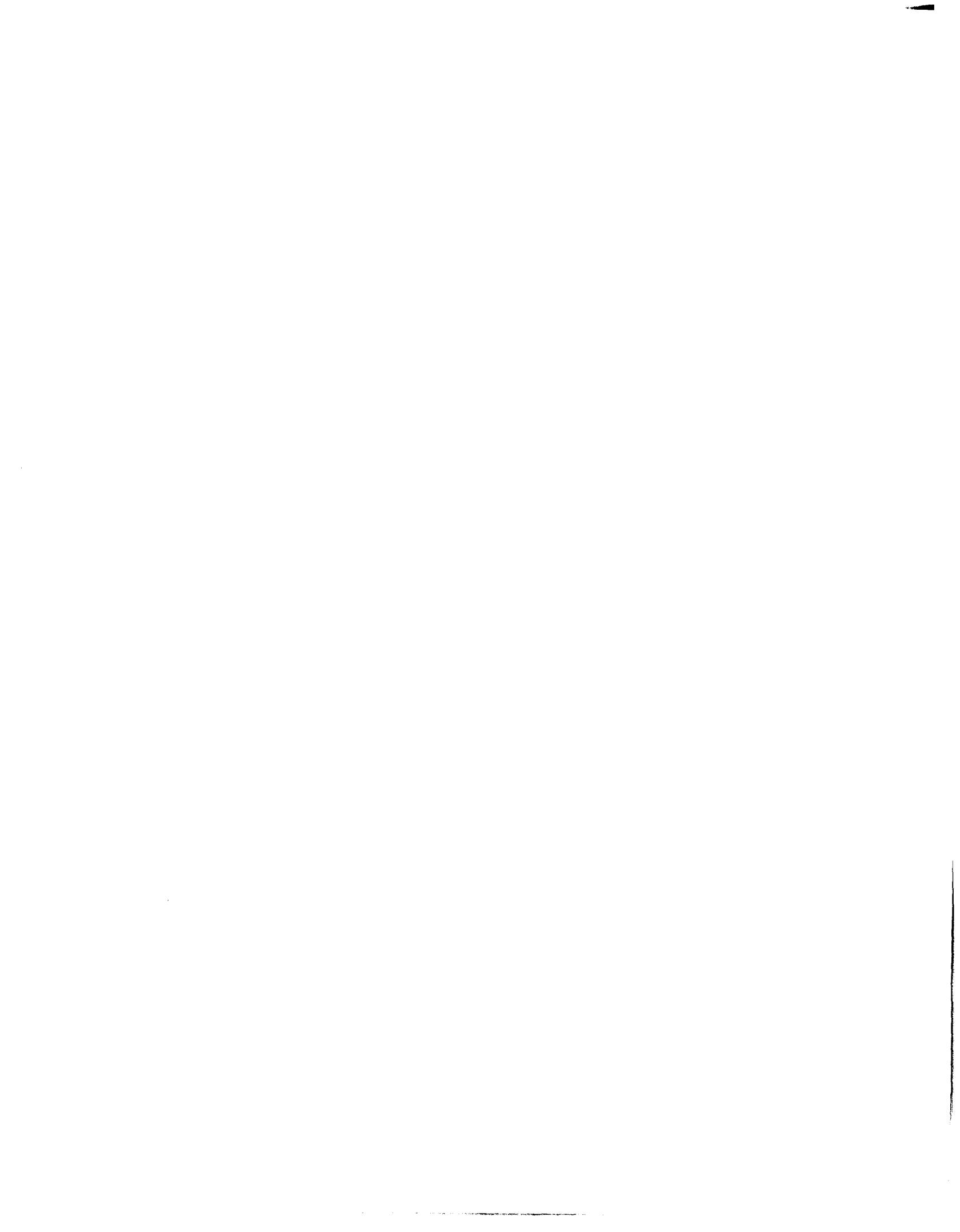


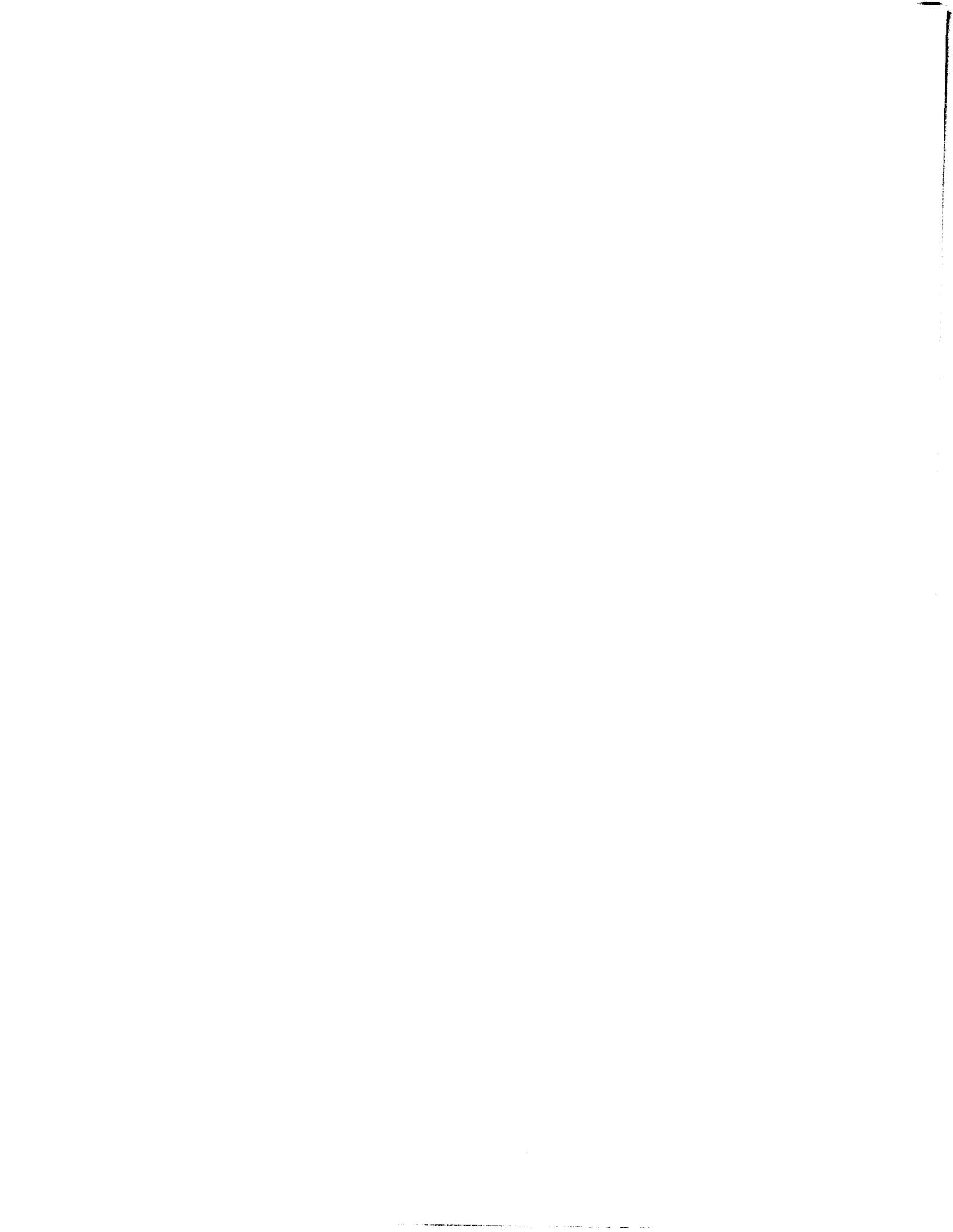
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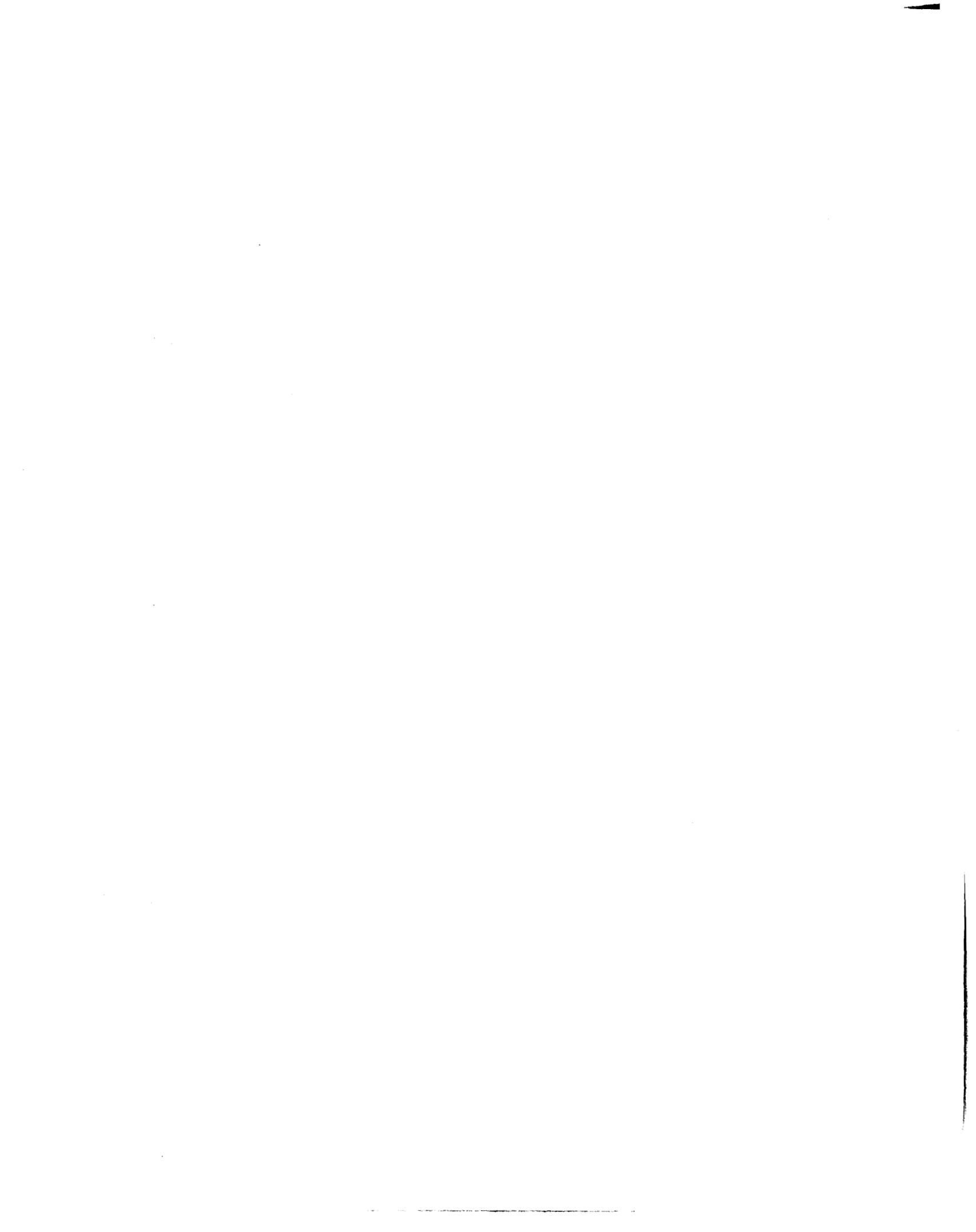


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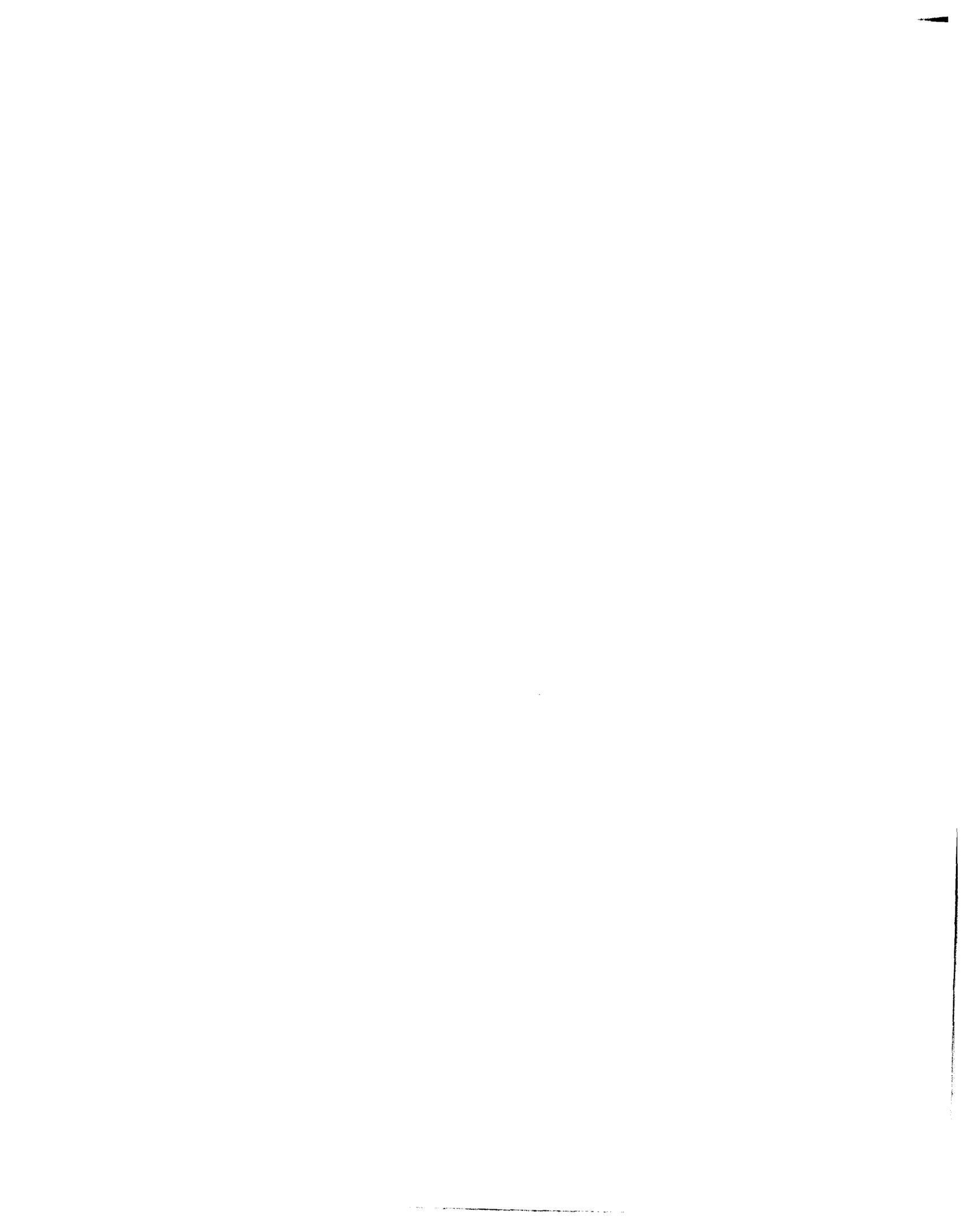


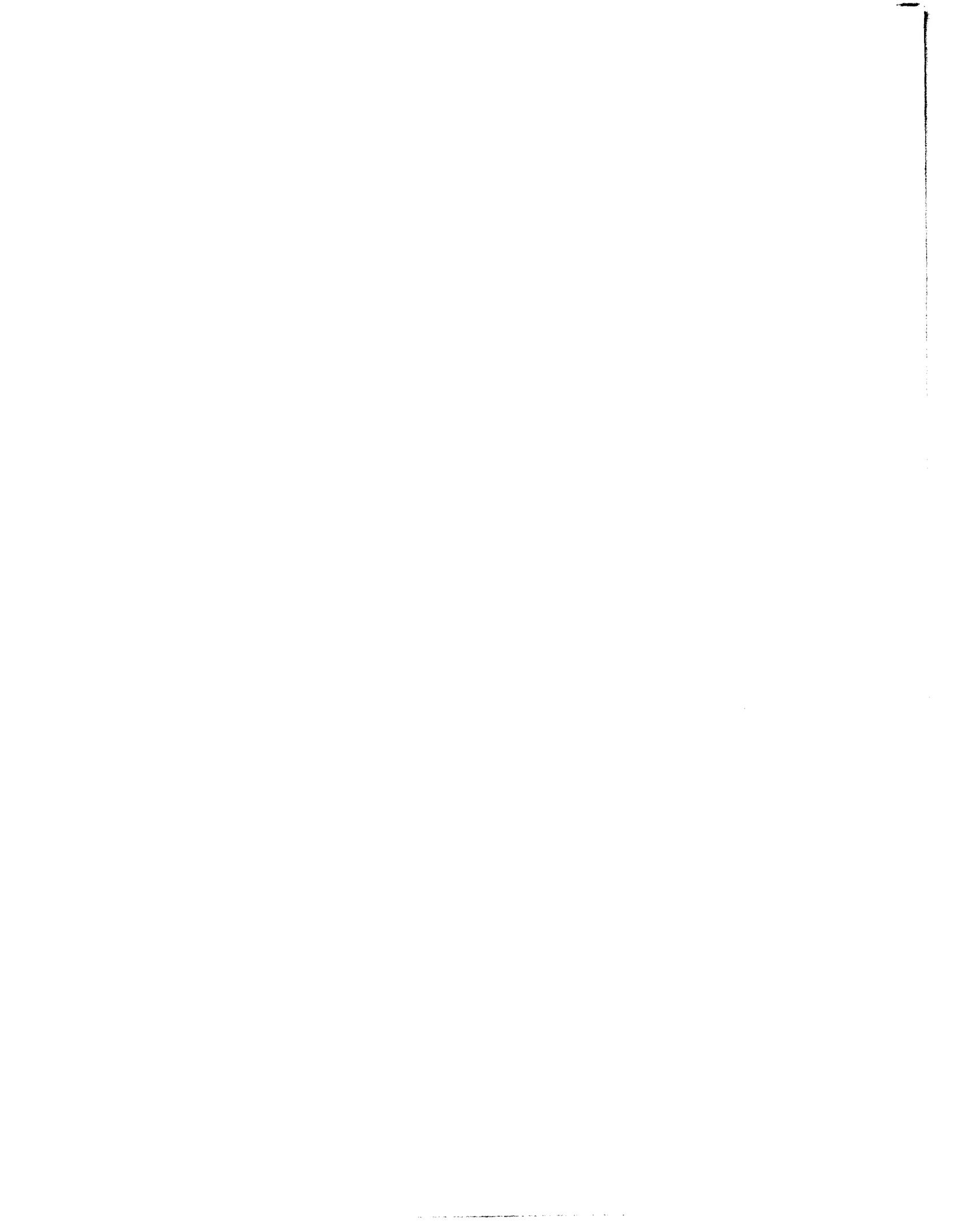


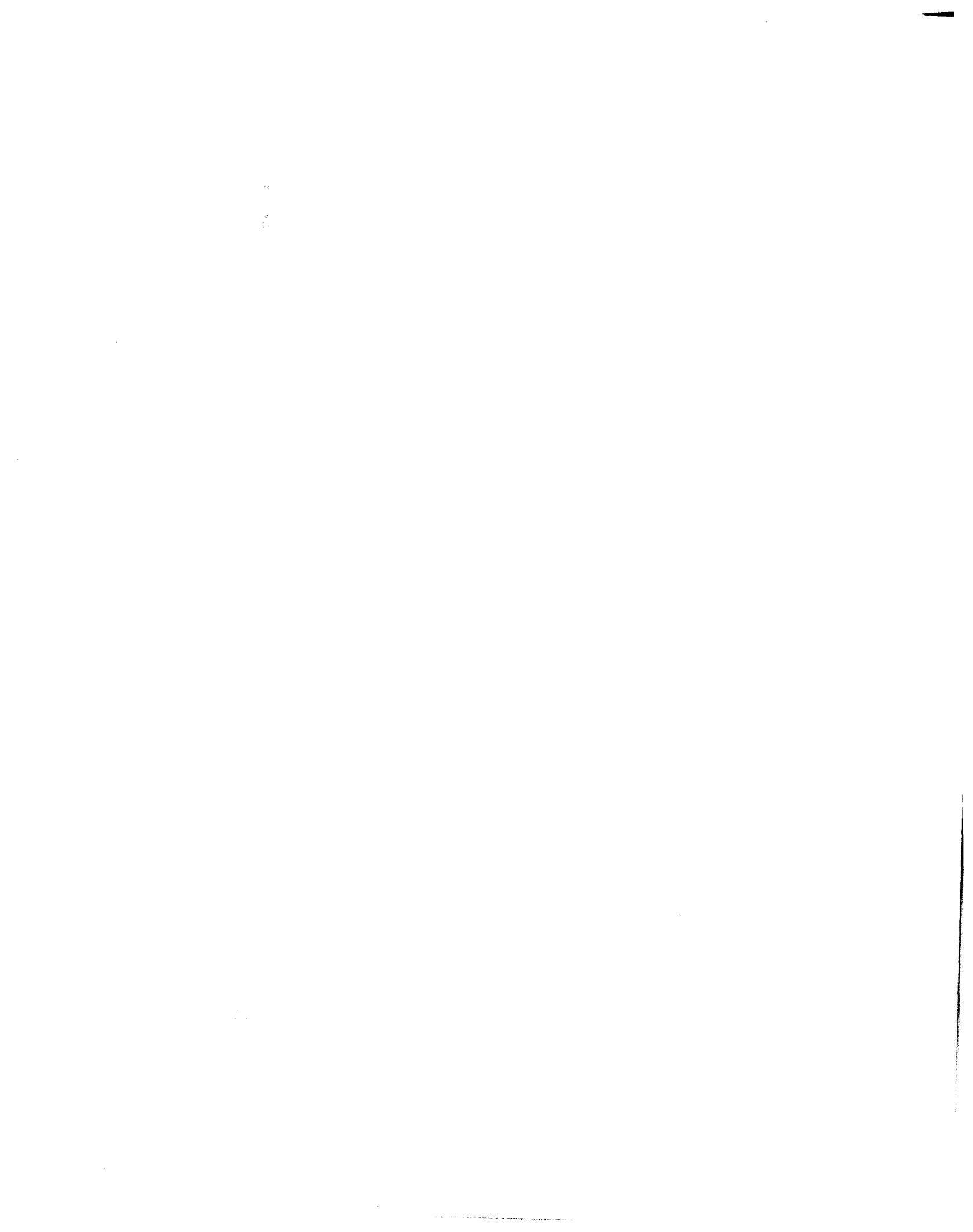


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Abstract

Automated visual inspection of printed wiring is providing research opportunities in completely automated optical systems technology. This paper addresses device design considerations, particularly the important problem of turning an optical inspection device into a tool for manufacturing process analysis and control.





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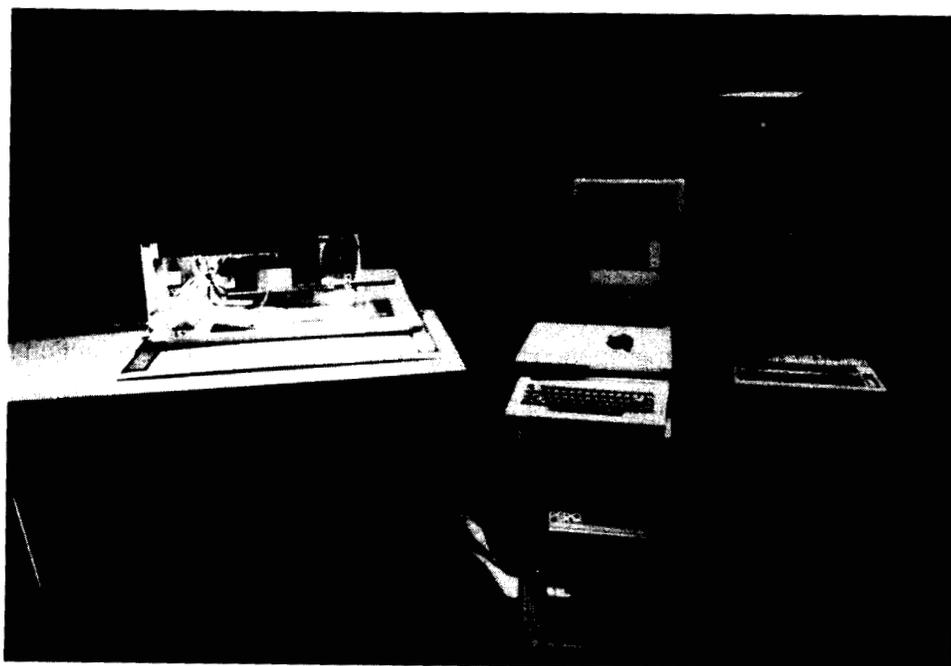


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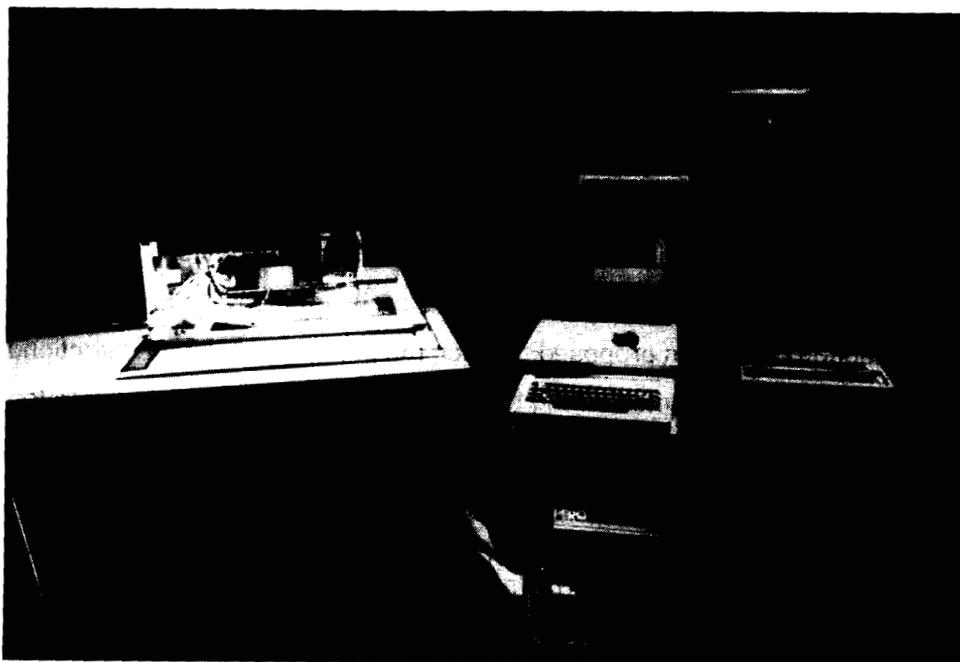


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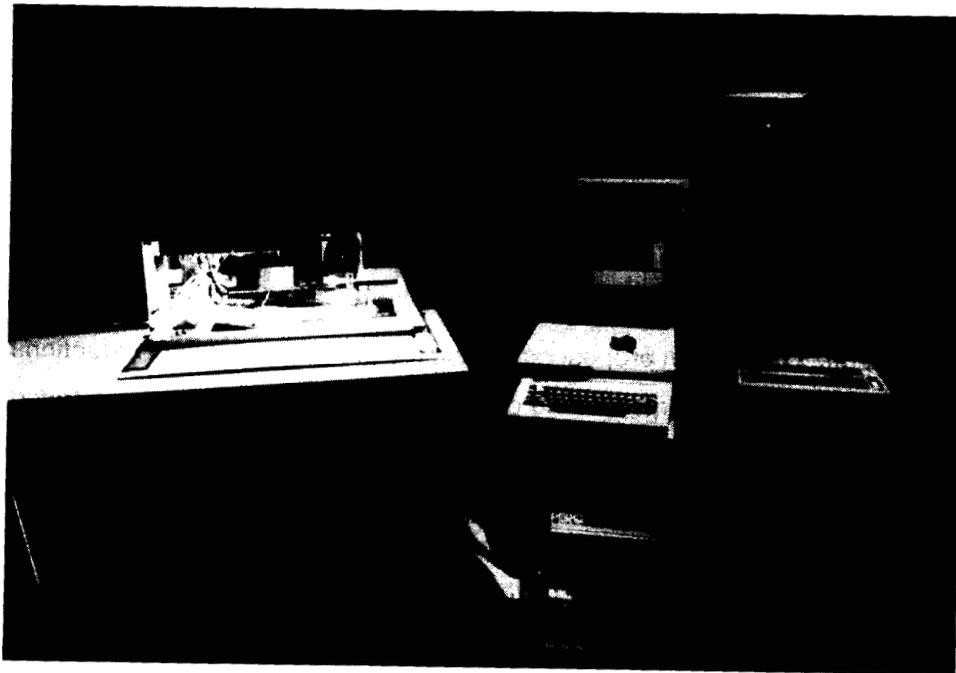


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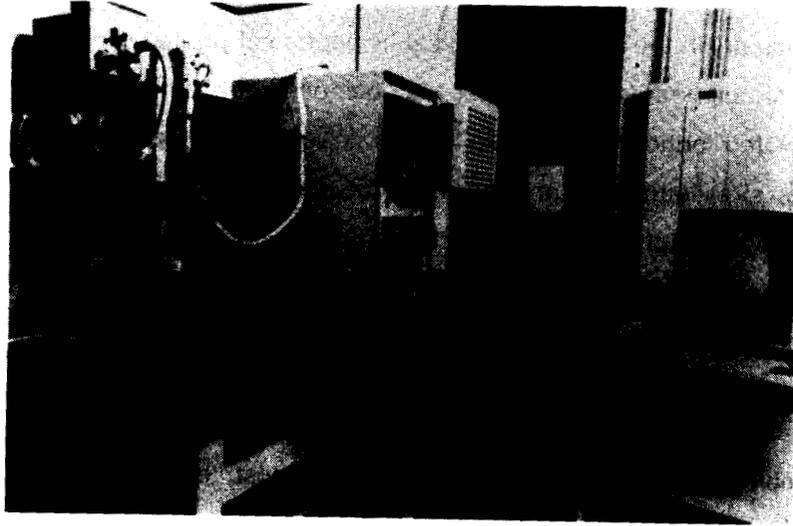


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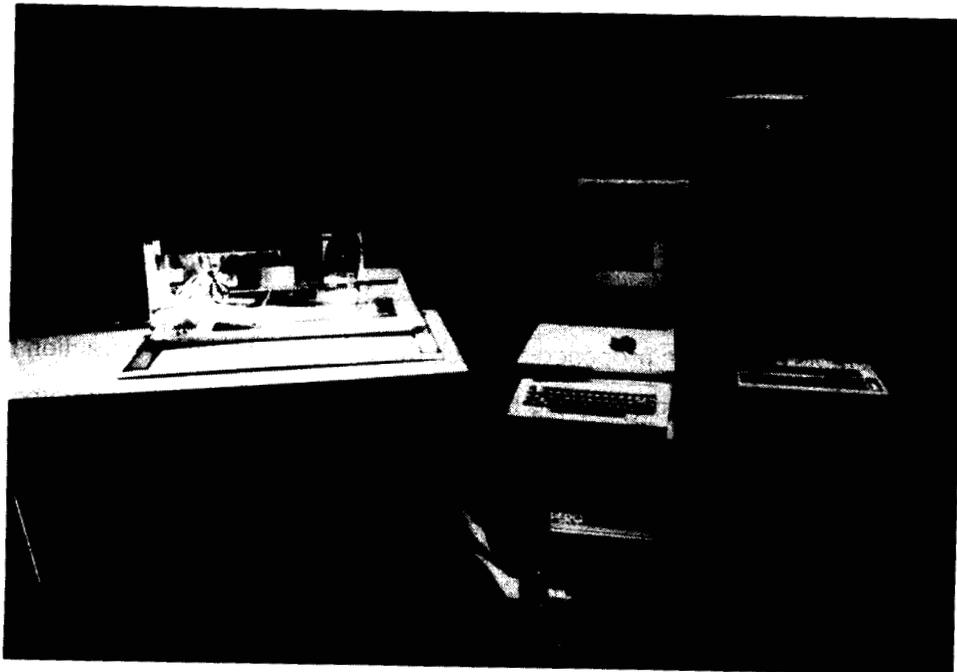


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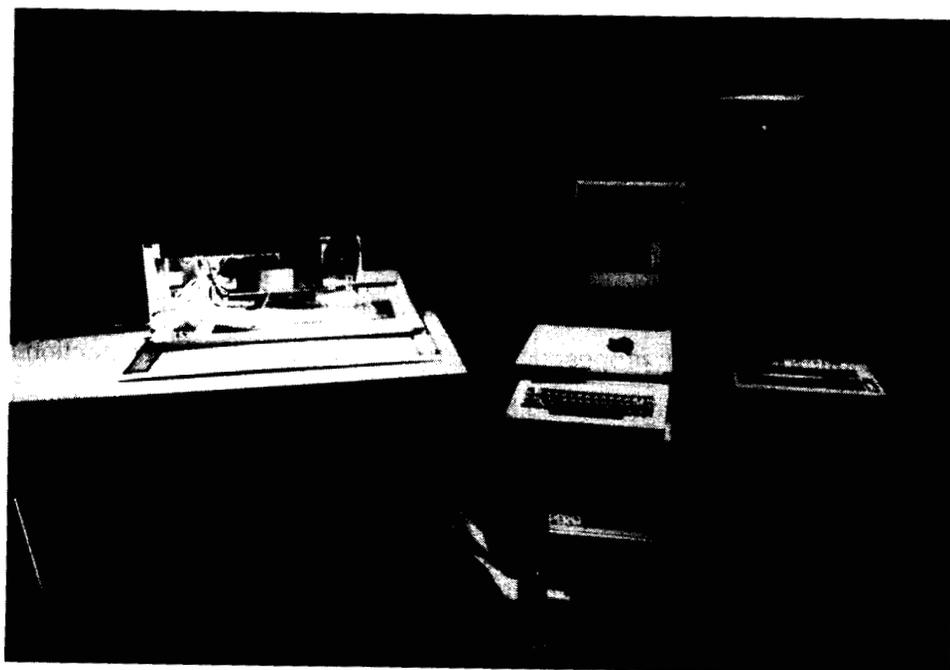


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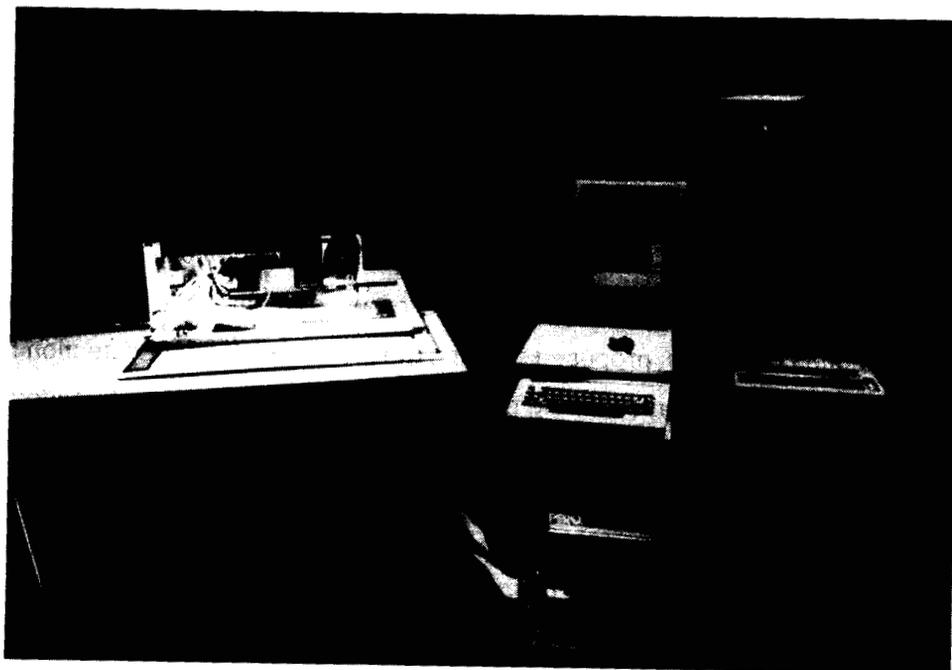


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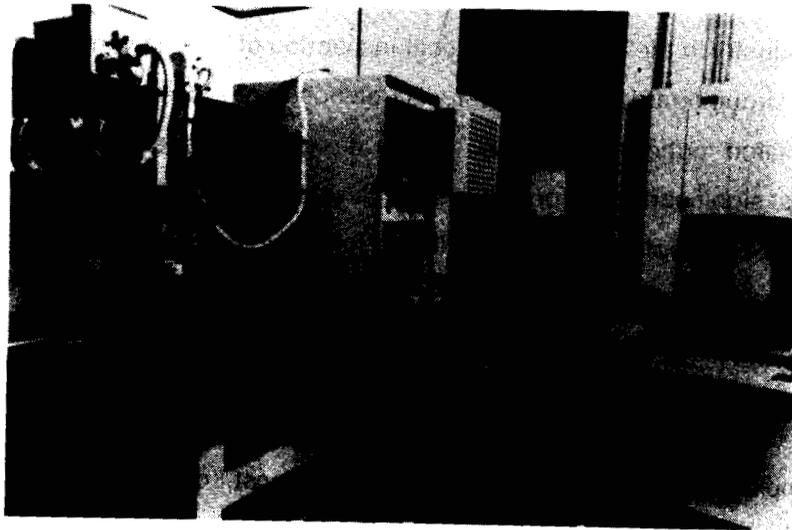


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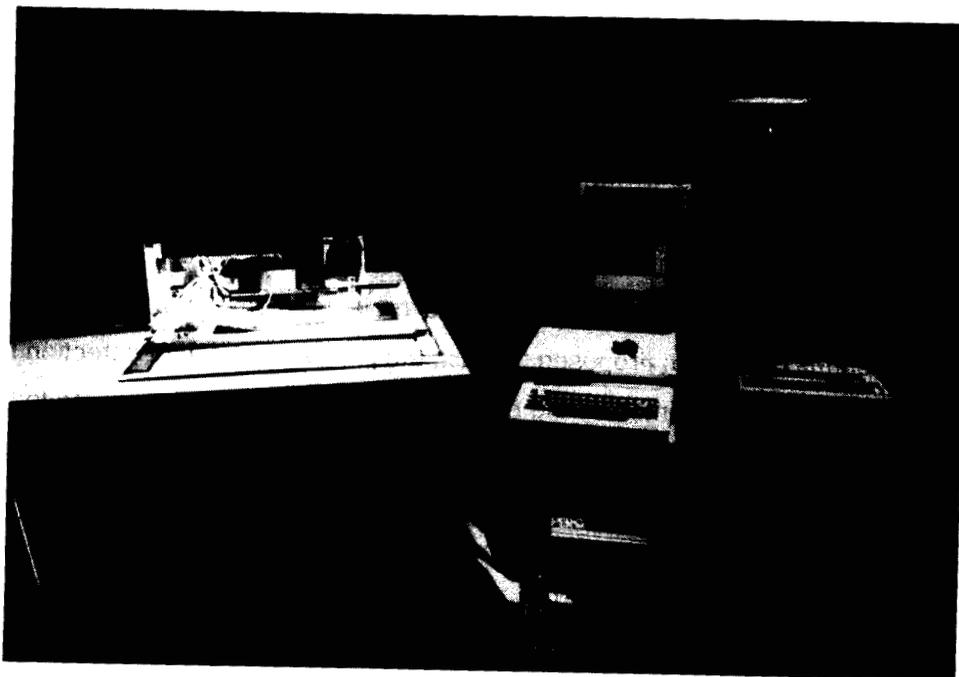


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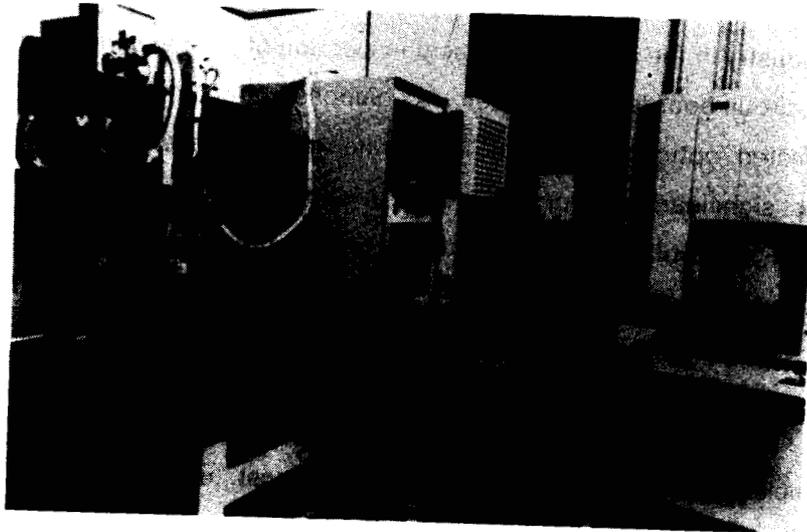


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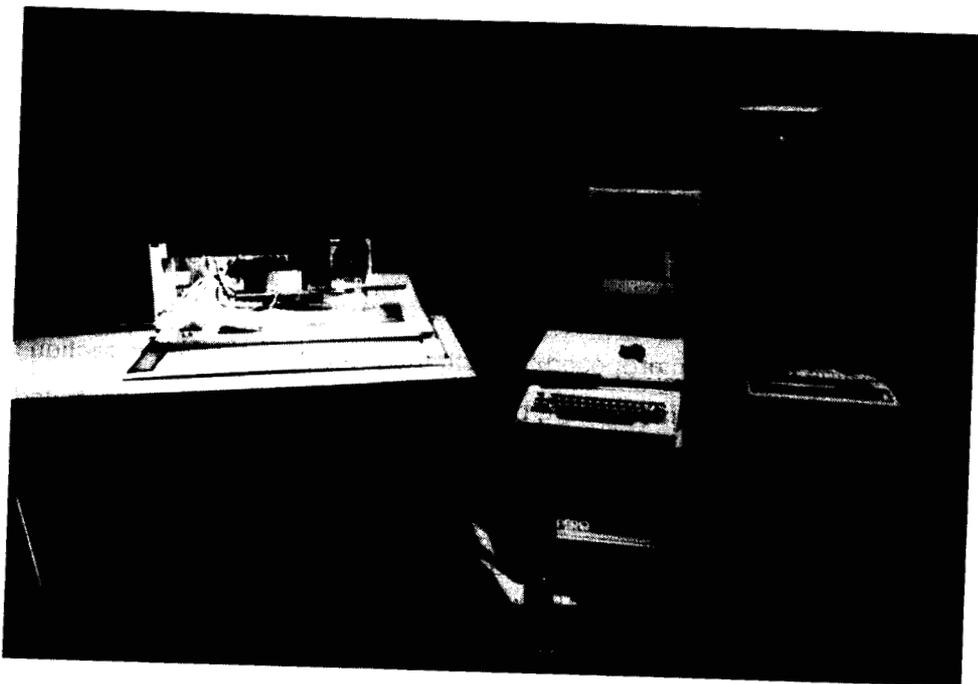


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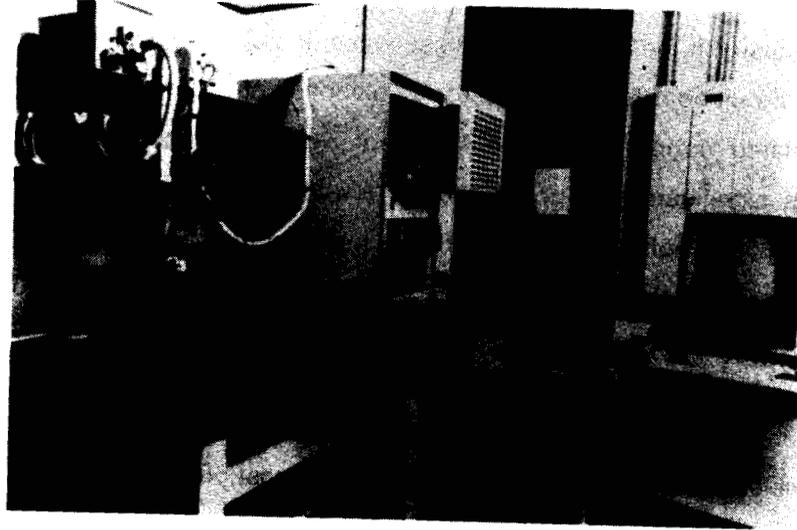


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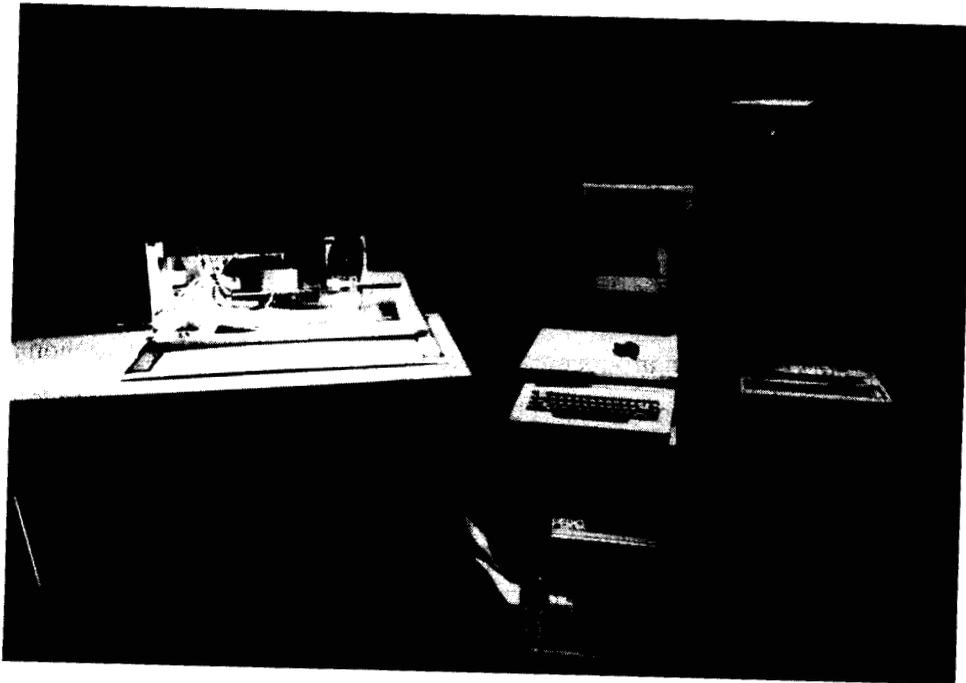


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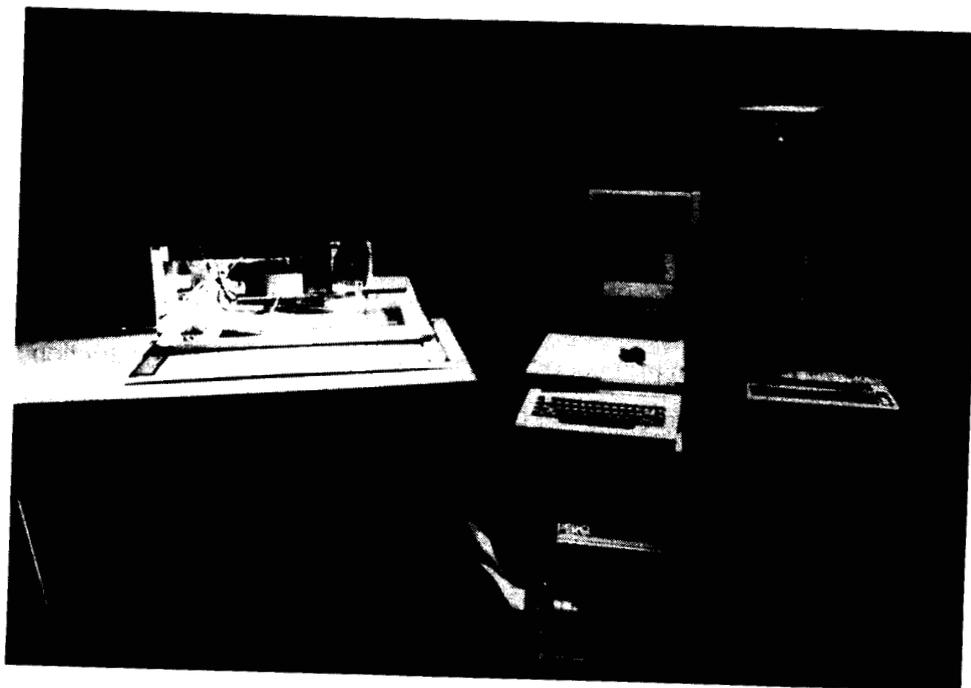


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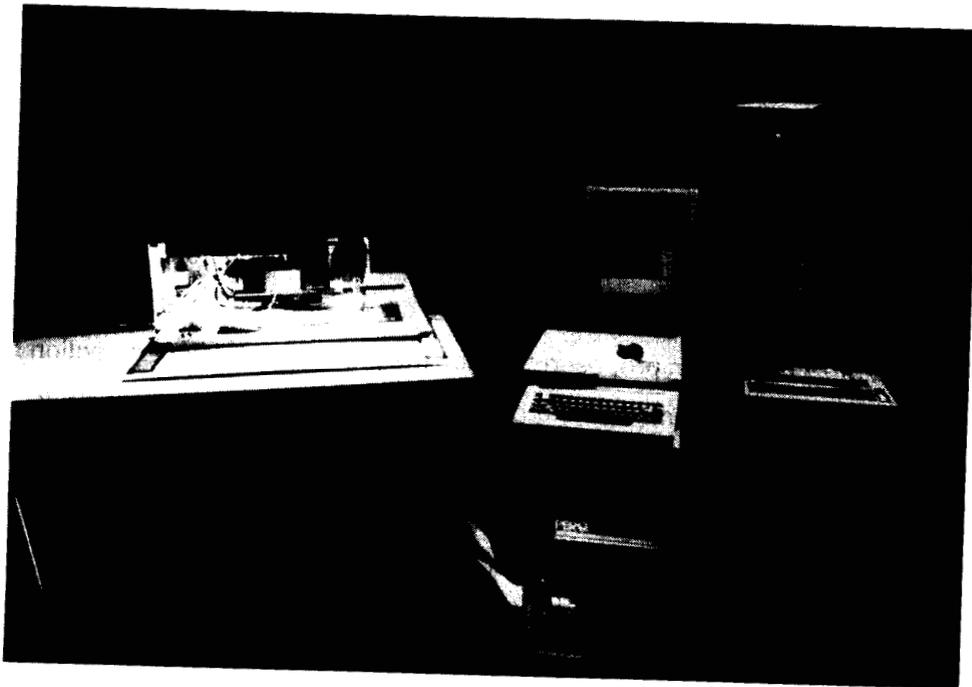


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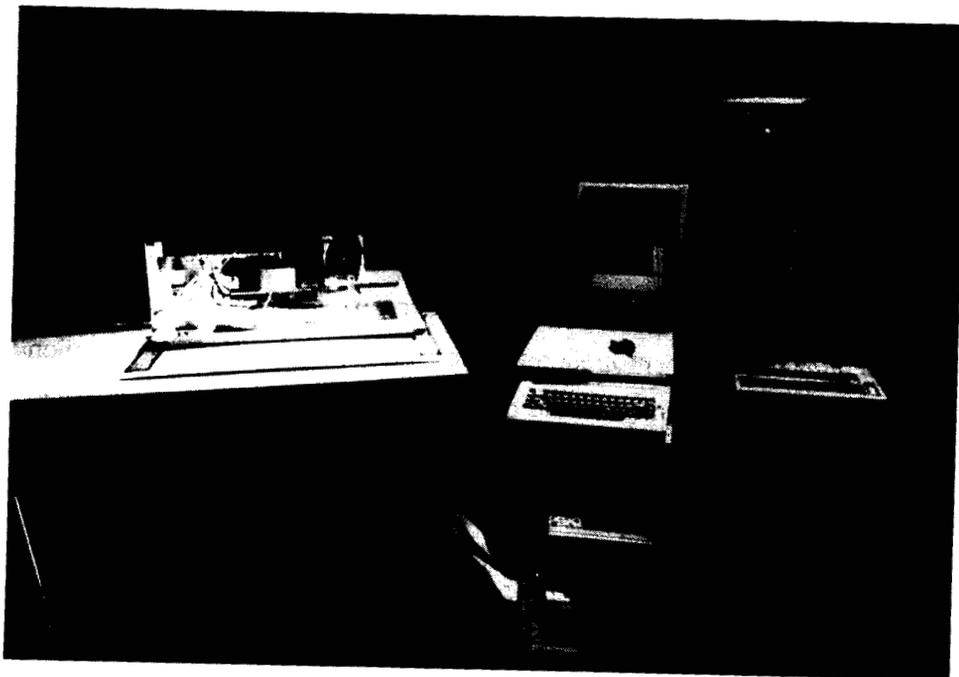


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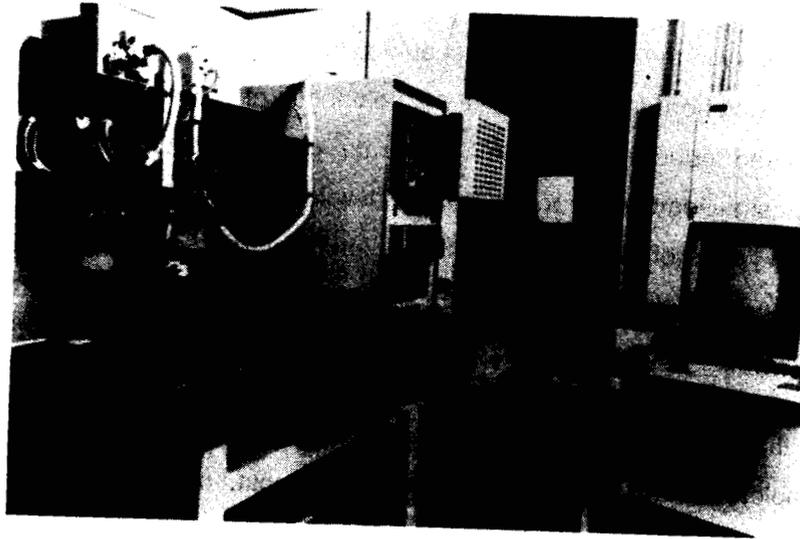


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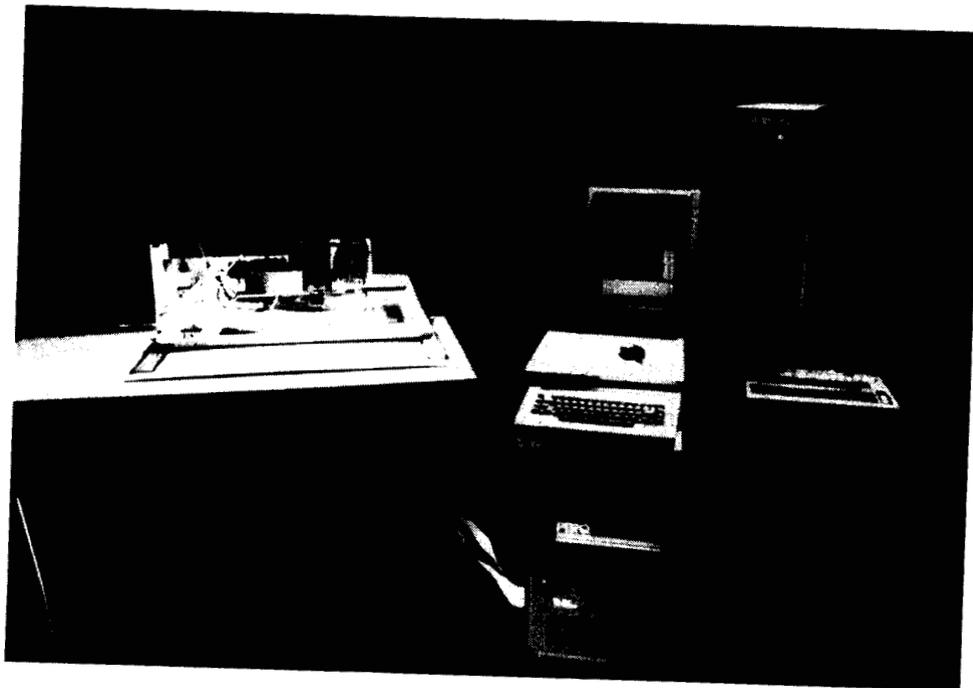


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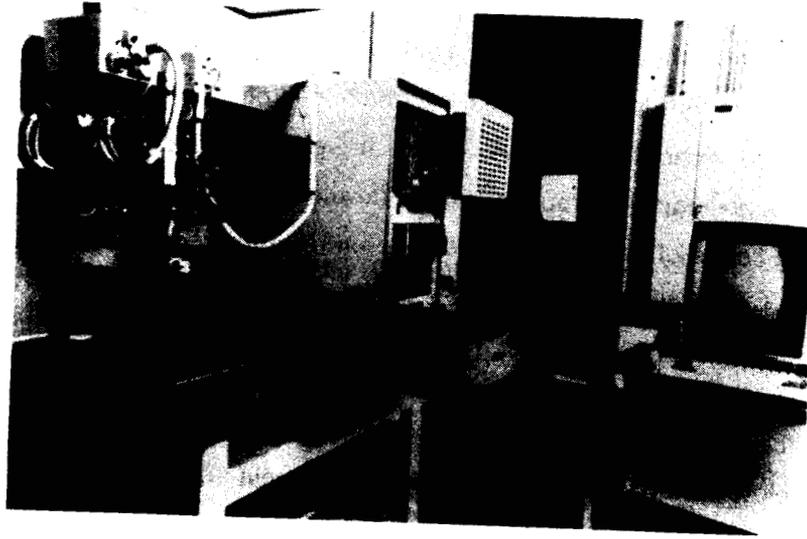


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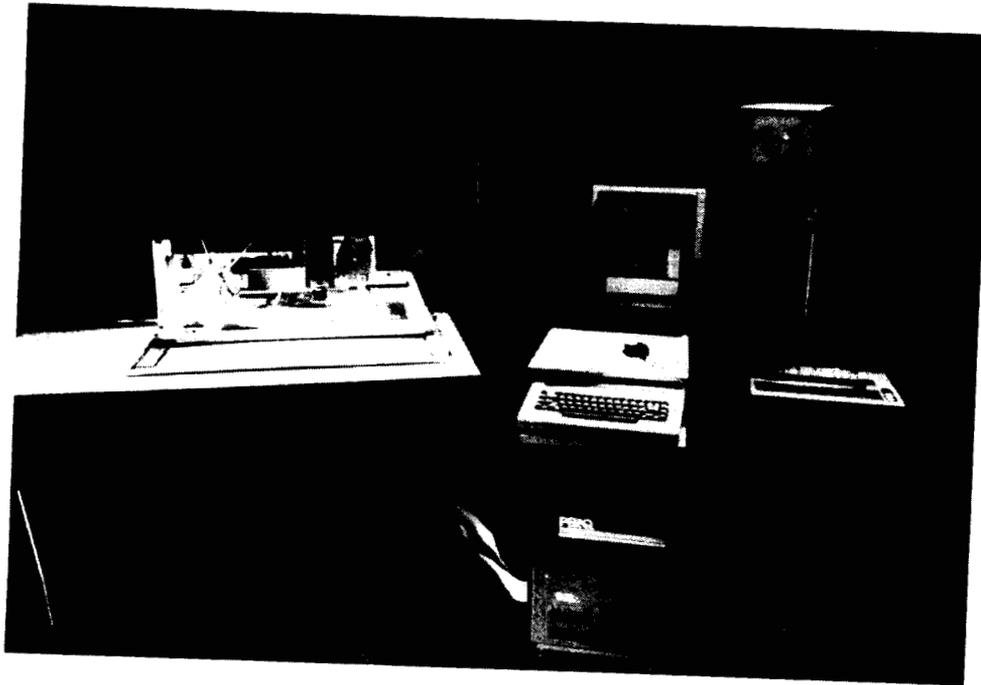


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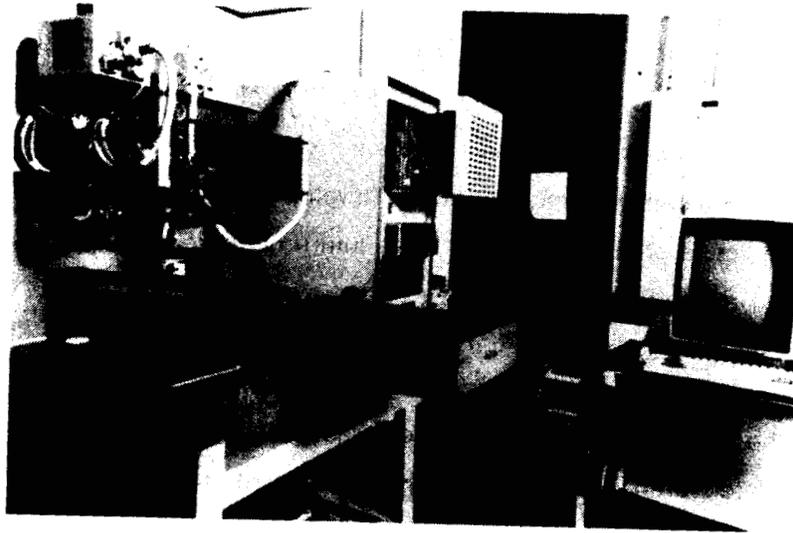


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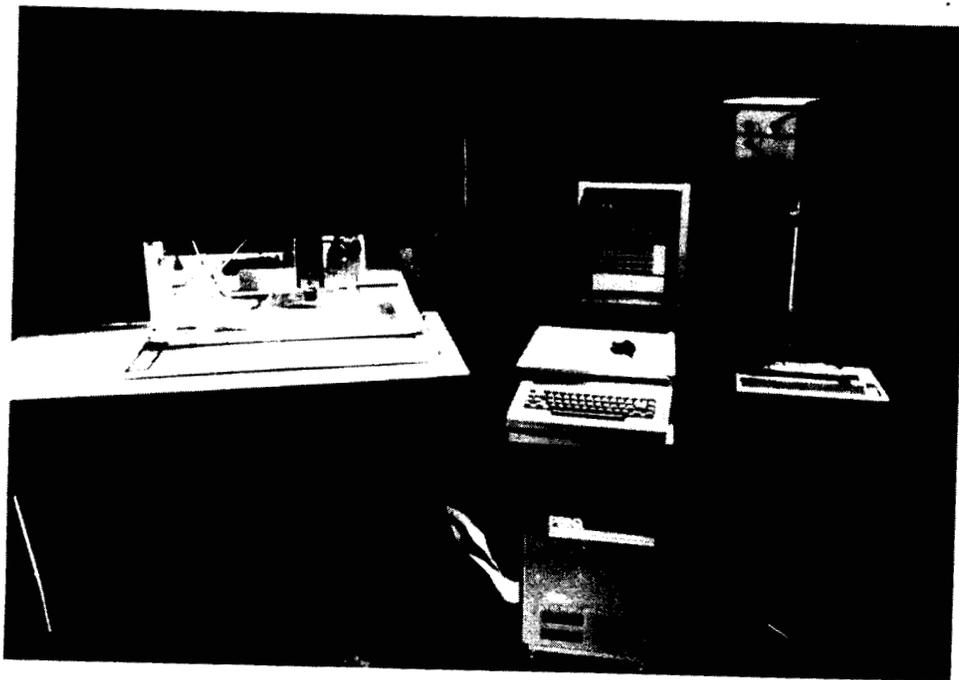


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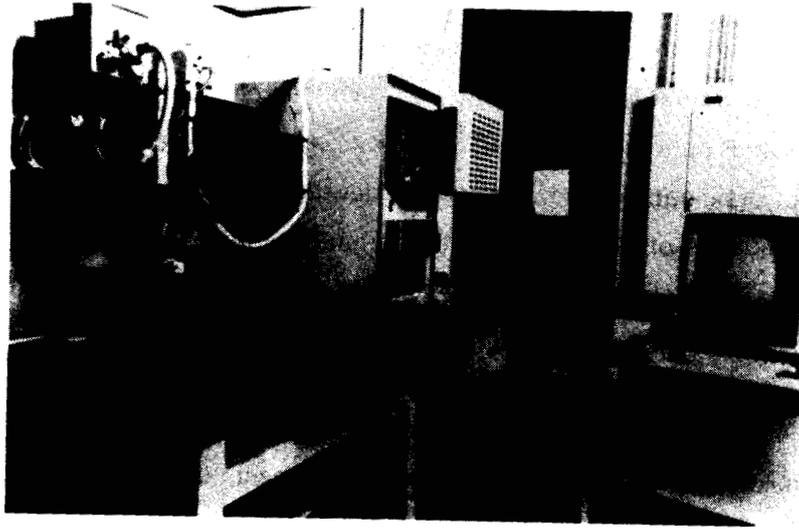


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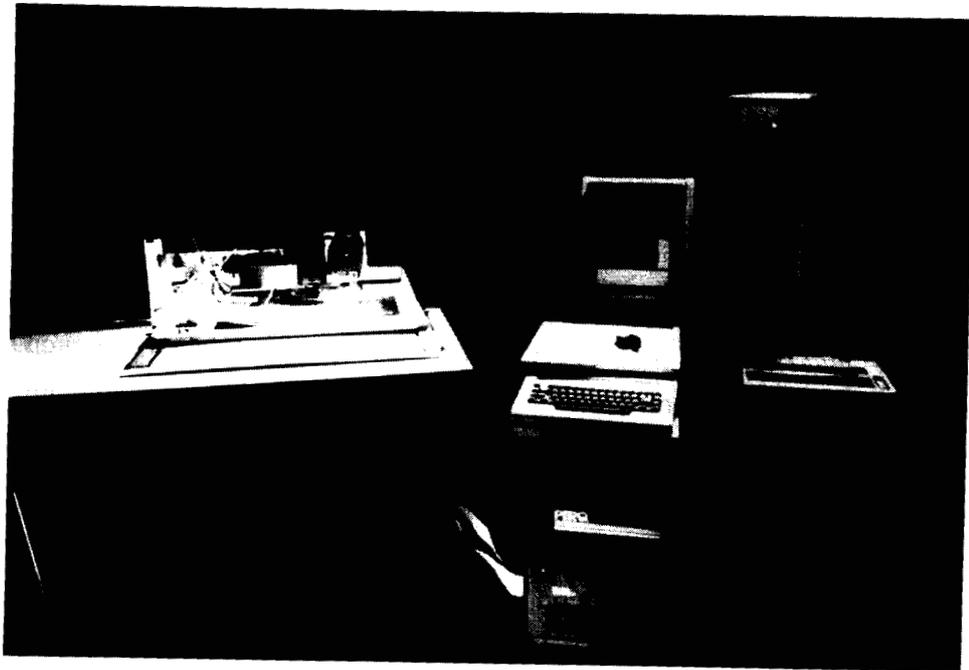


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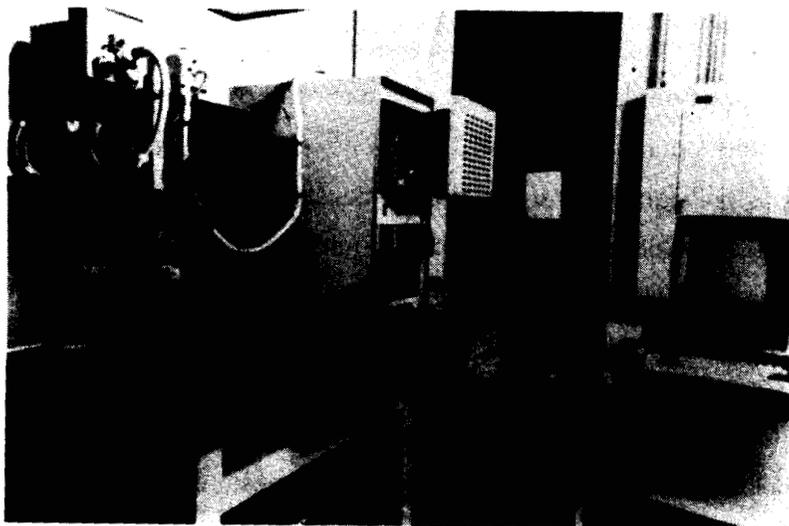


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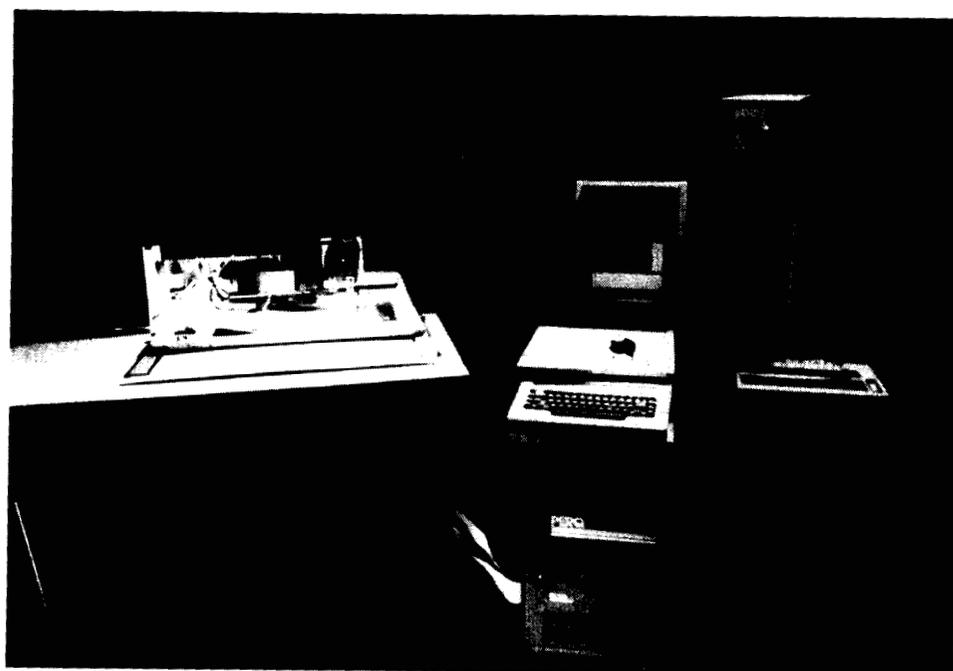


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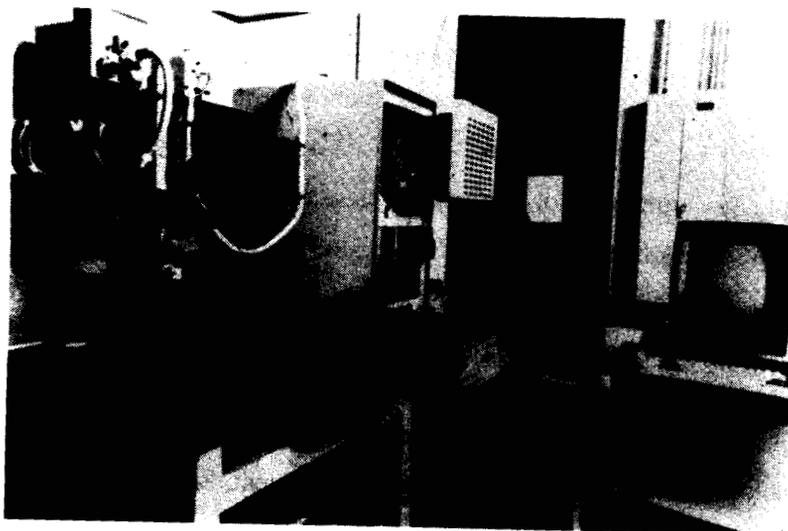


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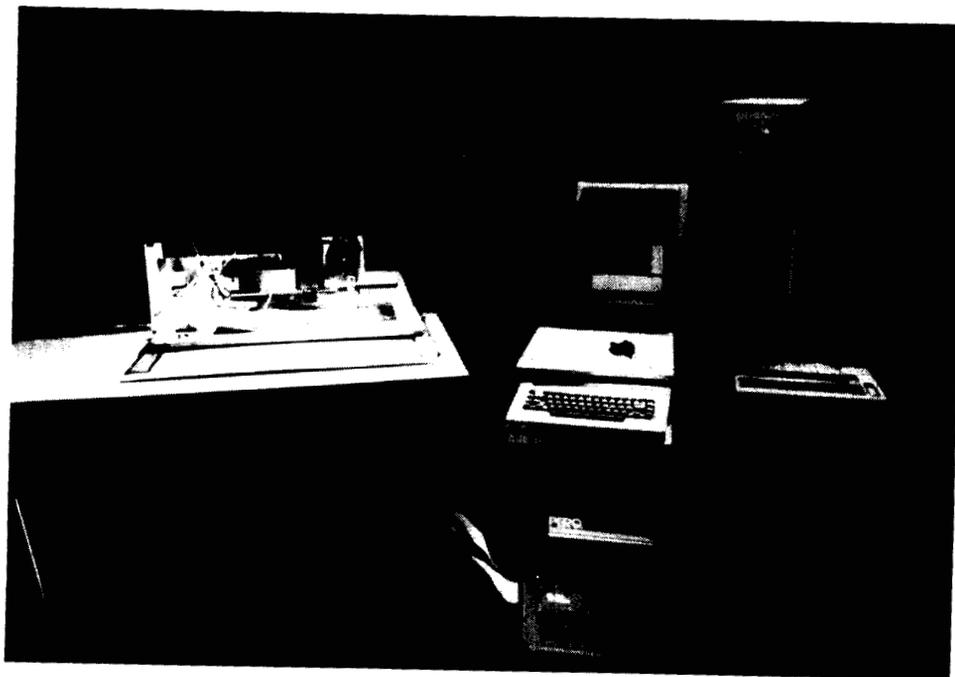


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