

Code Matrix Development Objective

1. Introduction

This development objective outlines the requirements for the design and fabrication of an ~~instrument to automatically read out~~ ^{automatic code matrix reader.} ~~binary ~~with~~ coded information on aerial film.~~

2. Concept.

It is the objective of this program ^{to build an} ~~which will~~ ^{device for} automatically read out binary coded information contained on a specific photographic collection systems.

3. General Description

There exists a requirement for a code matrix reader to provide rapid read out of auxiliary data recorded in ^{digitally} ~~digital~~ coded form ^{as} ~~a~~ compact matrix ^{of} ~~and~~ dots exposed in the margin of each film ~~print~~ frame.

4. Requirements.

The code matrix reader shall provide the following:

- a. Capability of reading out auxiliary ^{of binary} data in the ~~form~~ ^{of} ~~the~~ ^{matrixing} ~~dots~~ ^{of} in the ~~margin~~ of each film frame.
- b. Capability of accepting 1,000 ~~foot~~ ft. rolls of 35 mm through $9\frac{1}{2}$ inch ^{lengths} ~~input~~ ^{width} films.
- c. Capability of positive ~~rapid read out~~ accurate read out regardless of placement of auxiliary digital data as long as it is parallel to or ^{aligned} ~~aligned~~ with the photo frame.
- d. The data block formats are ~~not~~ undeterminable beyond that specified in ^{Mil-Std} ~~Mil standard~~ 782A. However, this reader shall have conformity to any format ~~by~~ replaceable reading heads designed for specific formats ~~as~~ they come into being.
- e. The shape and the spacing of the dots to be read by ~~this~~ this reader shall conform ~~to~~ to that ~~as~~ specified in

Mil-Std

- * ~~Mil standard~~ 782A. Additionally ~~designed~~ designs shall be such specific or varied formats can be read by replacement heads.
- f. Capability of reading ^{the} auxillary digital data blocks shall be limited only by ~~the~~ speed of the read-out equipment.
(magnetic tape, or high speed card punch)
- g. The film data read-out shall be converted to electrical signals which shall be used to record on a digital computer input form such ~~x~~ as punch ~~xxxxxx~~ cards or magnetic tape.
- H. Two ~~xxx~~ read out options shall be considered ⁱⁿ preparing the pricing :

(1) magnetic tape - IBM format,

(2) high speed card punch.

The tape recorder shall be ^{considered} an intergal part of the system.

The card ~~xxxxx~~ punch will be GFE of the type recommended by the ~~xx~~ contractor.

Pricing information should also be prepared for a second optional unit.