

Program Plan

Declassification Review by
NGA/DoD

To John C.

From

Date 20 May, 1970

Subject: - Program Plan for Interim Period.

The status of this program is such that we can now begin final proceedings to conclude the preliminary phase of this program. This preliminary phase included set-up of the holographic interferometer and coherent processor, and activation of these systems for fabricating holographic filters for target detection and image restoration. We have performed these tasks and met these objectives with good results. We now want to put together a set of illustrations and results to enable demonstration of the objectives that we have gained.

To demonstrate the goals that have been attained we can use the specially prepared target for demonstration of target detection, as well as some simulated or de facto operational material for target detection. We also are to demonstrate image restoration and will generate motion blurred images for the restoration demonstration. The program is as follows: -

- (1) Prepare imagery for demonstration of target detection utility to operational materials and system utility to image processing. Obtain simulated or real reconnaissance imagery with targets of interest for the former. Also prepared target for the image processing demonstration.

Target should be blurred sufficiently to effect spurious resolution of the alph-numeric characters in the target format. Note processing requirements previously discussed and formatting of blur target.

(2) Fabricate filters for targets generated in (1) above. Follow directions we discussed to ensure that the expected signal is recorded on the hologram filter. This is essential if filtering is to occur. To accomplish this it may require the filter fabrication step from a specially generated target input, such as a slit for image blur removal or a very high contrast image of a plane. If the diffraction pattern is not apparent on the filter, out beyond the central orders of the interferometer point response then the filter is not satisfactory.

(3) Test filters and record data on film

(4) Print up results of test series including original input, the filter, and the detected output (correlation beam only).

(5) Draft out diagrams that can be used for briefing material. Direct all for display in lab.

(6) Write up sufficient documentation to allow initiated to operate system. In essence this is an operators manual.

Schedule

Task no.	May 20	21	22	25	26	27	28
1	x	x	x	x	x	x	x
2	x	x	x	x	x	x	x
3		x	x	x	x	x	x
4					x	x	x
5						x	x
6						x	x