

R & D CATALOG FORM		DATE 15 April 1969
1. PROJECT TITLE/CODE NAME Microdensitometer Modifica- tions (Scan Control and Sampling System)	2. SHORT PROJECT DESCRIPTION This project is to develop a digital scan controller and a time based sampling system for the [] 1032T Trichromatic Microdensitometer now in use at NPIC	
3. CONTRACTOR NAME []		4. LOCATION OF CONTRACTOR Declass Review by NGA.
5. CLASS OF CONTRACTOR Manufacturer	6. TYPE OF CONTRACT FP	
7. FUNDS FY 19 68 \$ None	8. REQUISITION NO.	9. BUDGET PROJECT NO.
FY 19 69 \$ []	10. EFFECTIVE CONTRACT DATE (Begin - end) May 1969 - July 1969	11. SECURITY CLASS. AA - Confidential T - Unclassified W - Unclassified
FY 19 70 \$ None		
12. RESPONSIBLE DIRECTORATE/OFFICE/PROJECT OFFICER TELEPHONE EXTENSION DDI/NPIC/TSSG/DED/[]		
13. REQUIREMENT/AUTHORITY The [] 1032T Microdensitometer is limited in its ability to (a) scan microscopic areas of imagery without producing extraneous data and (b) analyze film imagery which exceeds 170 lines per millimeter in resolution.		
14. TYPE OF WORK TO BE DONE Engineering Development		
15. CATEGORIES OF EFFORT		
MAJOR CATEGORY Precision Measurement	SUB-CATEGORIES Microdensitometry Optical Systems	
16. END ITEM OR SERVICES FROM THIS CONTRACT/IMPROVEMENT OVER CURRENT SYSTEM, EQUIPMENT, ETC. The Contractor will modify the Microdensitometer to: (a) Control the length of the scan with digital switches and counters instead of microswitches, and (b) change the density sampling system from a mechanical base to a time base which will allow a sampling rate of 10 samples per micrometer (versus the present rate of 1 sample per micrometer).		
17. SUPPORTING OR RELATED CONTRACTS (Agency & Other)/COORDINATION This contract will be run concurrently with a contract to modify a stage for the 1032T Microdensitometer. There is no overlap on these projects. Coordination has been performed through EXRAND.		
18. DESCRIPTION OF INTELLIGENCE REQUIREMENT AND DETAILED TECHNICAL DESCRIPTION OF PROJECT (Continue on addi- tional page if required) The scan controller consisting of decade counters, switches and comparison logic will replace the microswitch controls to allow the scan length to be preset to from 1 micrometer to 1 decimeter. This precise programming of the scan length will eliminate the extraneous data now produced on small scans and will reduce costly processing of the data. The sampling system will be modified so that it will be triggered by a crystal oscillator (the "clock") instead of directly by the stage movement. The oscillator will allow better control of the sampling rate and will permit more frequent sampling, thereby reducing the limitations to analyzing high resolution imagery.		
19. APPROVED BY AND DATE		
OFFICE Approved For	DEPUTY DIRECTOR Release 2005/05/20 : CIA-RDP78B04770A001400070015-5	DDCI