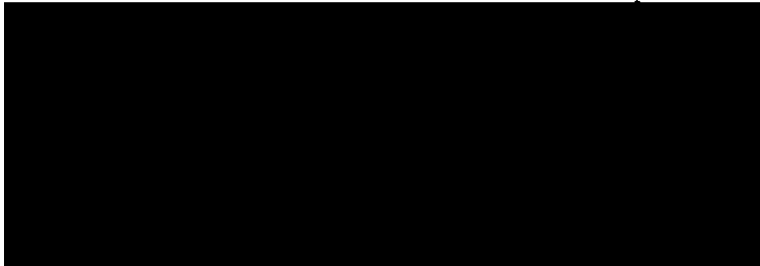


DECLASS REVIEW by NIMA/DOD

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Friday, July 26, 1963

Linear Phasolver Measuring Engine



Contract _____

Contract start date was Monday, July 15, 1963 Phase I demonstration with existing pattern due at the end of the 10th week, 9/23/63. Phase I will be completed 10/14/63 according to their present project plan.

Phase II which is the preparation of a new pattern to achieve 1 micron measuring accuracy and demonstrating measuring capability, runs concurrently. Completion due 6/22/64. First monthly progress report is due in the mail Aug. 10.

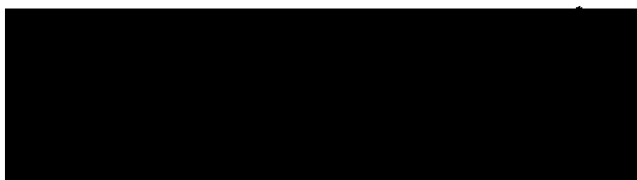
They have made a flying start on this job. They found a coupler existing which can be used for the demonstration. Accuracy of the existing pattern is unknown and it does have distortion at both ends. The demonstration will however demonstrate the principle of unambiguous position measurement without counting pulses. The Driver has 128 pole pairs and the coupler will average over 80 pole pairs, so quite good accuracy can be expected.

STATINTL

For phase II they have started the design of a new sine pattern. They want to work with a .001" gap between the plates and there for want to improve the crossing angle between the driver and coupler patterns. ~~Feb~~ They are also planning to use multiple symmetrical patterns to reduce sensitivity to skew.

An important capability which they may ultimately want to take advantage of is the electrical compensation of systematic errors.

STATINTL



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Contract File

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