

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Instrumentation Laboratory
Cambridge, Massachusetts

A Laats

I. S. S. Memo #247

TO: C. A. Muntz

FROM: R. Crisp

DATE: 31 August 1965

SUBJECT: Block II CGC Inertial Component Compensation Programs

At a meeting on 8/26/65 with D. Hoag and J. Flanders and yourself to discuss the Block II CEI specification, it was agreed to widen the range of some compensation parameters and reduce that of others in order to obtain reasonable entry and internal CGC quantization. As a result it has been possible to obtain a uniform entry format in terms of practical units. The following table gives maximum values of bit size and maximum range consistent with these. The cyphers in the entry format represent under or over significant figures, the X's the significant figures.

TABLE

| Parameter | Maximum Bit Size | Range ^{±*} | Entry | Format Units |
|------------|------------------|---------------------|--------|----------------------|
| PIPA S. F. | 1-00 | 976 | XXX.00 | P. P. M. |
| PIPA BIAS | 0-01 | 2-5 | OOX.XX | CM/Sec ² |
| NBD | 0-1 | 512 | XXX.XO | Meru |
| ADIA | 0-1 | 512 | XXX.XO | Meru/g ^{**} |
| ADSRA | 0-1 | 512 | XXX.XO | Meru/g ^{**} |

** In the interests of purity, we recommend the value at A. M. R. where the final measurements are made; g at AMR is 979.24 cm/sec².

* Maximum range is a result of bit size and internal scaling in CGC and is not to be construed as implying a possible component value.

P.S. It is proposed to use the same formats for the LGC.



Robert Crisp

31 August 1965

Page 2

Distribution:

D. Hoag
J. Miller
J. Flanders
R. Battin
R. McKern
T. Lawton
A. Green
L. Wilk
A. Laats
G. Silver
J. Feldman
E. Crowley
G. Bukow

RC/sh