



harveyCRANE[®] INC.

Cam Analysis and Cam Design Services

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HJC: 29 FEBRUARY 1992 (HCI / HJC EDITED 30 JUNE 2009)

CHRIS H. BOUVY (BORN 1896, DIED 1988)

ENGINE AND CAMSHAFT DESIGNER

DESIGNED THE 1936 CADILLAC V-16 (135 DEGREE BANKS)

DESIGNED THE 1949 CADILLAC V-8 OVERHEAD VALVE ENGINE

AUTHOR OF A JUNE 16, 1934 ARTICLE IN AUTOMOTIVE INDUSTRIES:

"TRIPLE-CURVE CAM GIVES MAXIMUM LIFT WHERE
SPACE PUTS A LIMIT ON TAPPET HEAD DIAMETER"

(SEE JULY 14, 1934 ARTICLE FOR ERROR CORRECTIONS)

THIS ARTICLE DESCRIBE'S:

"AN INVOLUTE FORM MAINTAINING THE UPWARD SPEED OF THE VALVE
CONSTANT FOR A PERIOD, AND FINALLY A CIRCULAR ARC NOSE WHICH
DECELERATES THE VALVE UNTIL ITS UPWARD SPEED IS ZERO."

HE FUTHER DESCRIBES "CONSTANT VELOCITY FOR THE TAPPET MOTION,
EQUAL IN MAGNITUDE (NUMERICALLY) TO THE TAPPET RADIUS."

THIS IS WHAT I DESCRIBE AS "DWELL AT MAXIMUM VELOCITY".

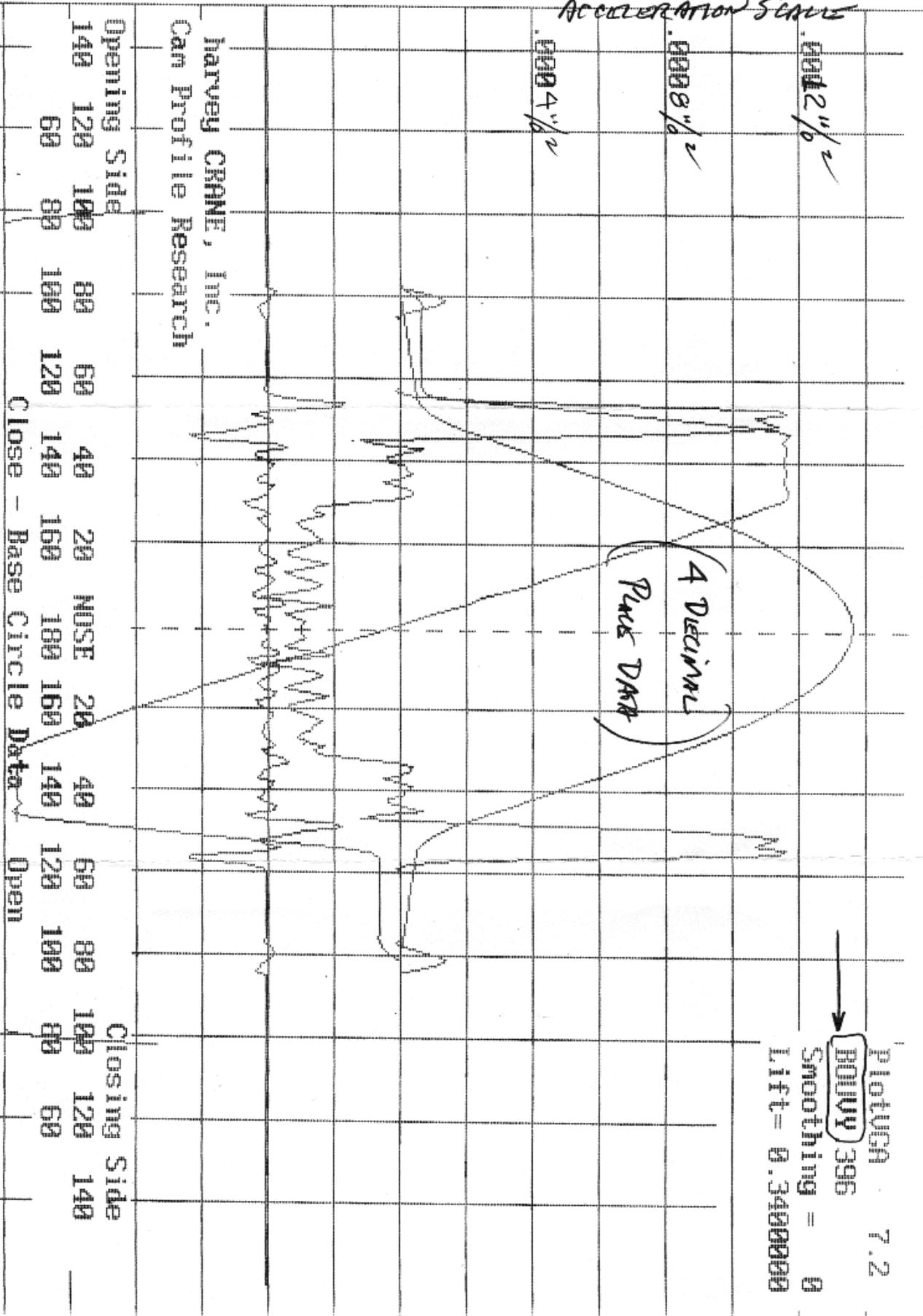
ACCELERATION SCALE

0002 1/2

0008 1/2

0004 1/2

harvey CRANE, Inc.
Can Profile Research



Plotter 7.2
 → 396
 Smoothing = 0
 Lift = 0.3400000

| Opening Side | | | | | | | | | | Closing Side | | | | | | | | | | |
|--------------------------|-----|-----|-----|-----|-----|-----|------|-----|-----|--------------|-----|----|-----|-----|-----|-----|-----|-----|----|----|
| 140 | 120 | 100 | 80 | 60 | 40 | 20 | NOSE | 20 | 40 | 40 | 60 | 80 | 100 | 120 | 140 | 140 | 120 | 100 | 80 | 60 |
| 60 | 80 | 100 | 120 | 140 | 160 | 180 | 160 | 140 | 120 | 120 | 100 | 80 | 60 | 40 | 20 | 80 | 60 | 40 | 20 | 0 |
| Close - Base Circle Data | | | | | | | | | | Open | | | | | | | | | | |

harvey CRANE, Inc. 385-760-4418