

Final Report
Contract DOT-HS-031-1-159

Vehicle Handling Performance

Volume 2 of 2 Vehicle Response Data

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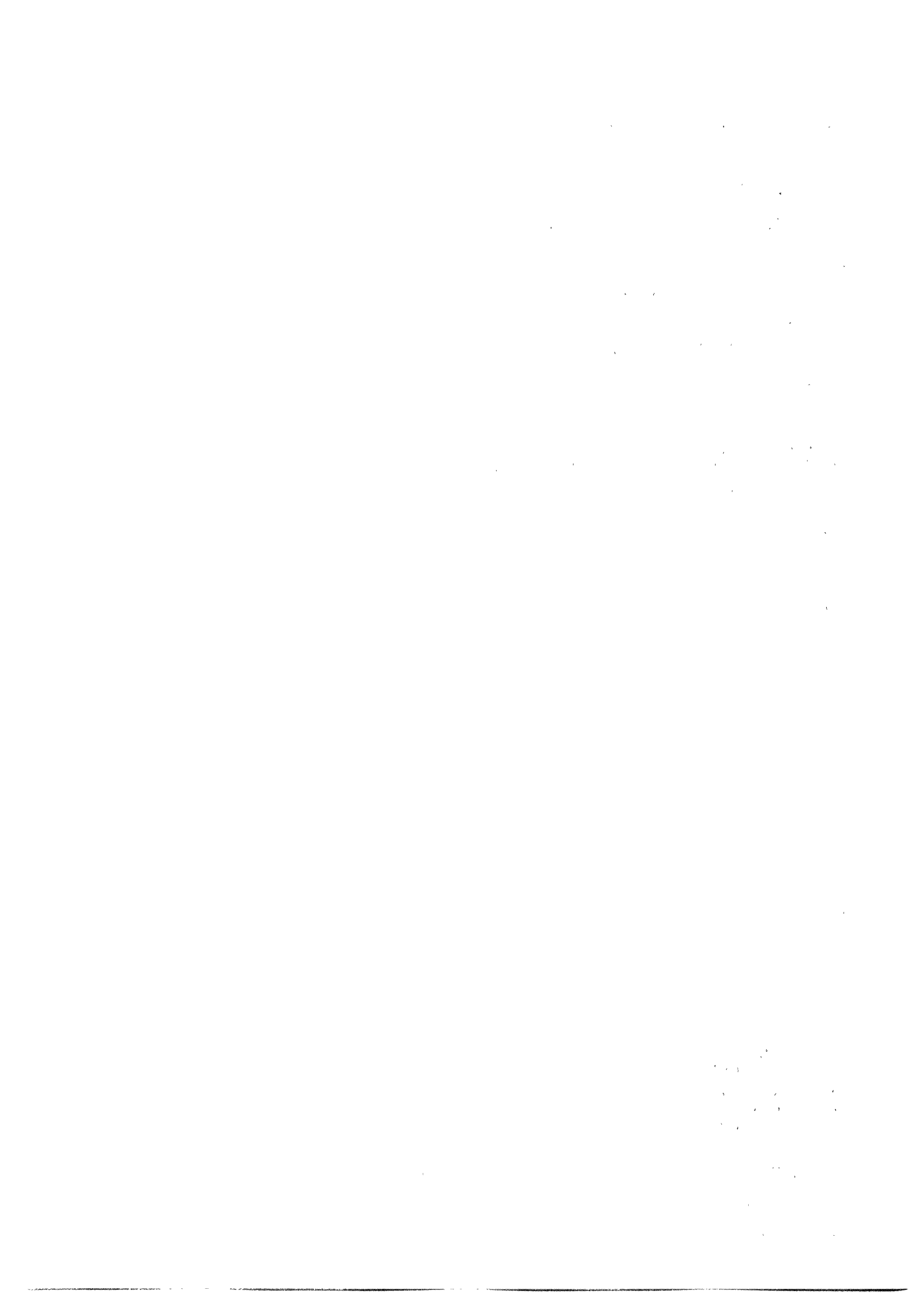
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VOLUME 2

VEHICLE HANDLING PERFORMANCE

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APPENDIX VII
FULL-SCALE PROGRAM DATA

This appendix contains the data plots for all test vehicles in all maneuvers. Each plot contains those data points which are considered to be valid as generated from the digital tabulation discussed in Appendix V.

The plots are organized by maneuver number groupings. The derivations of the various numerics are defined in Appendix V mathematically, and are redefined ahead of each group of plots in descriptive terms.

The data plots in each maneuver are arranged with an alphabetical order of vehicle presentation, as follows:

Ambassador (AMC)
Austin America
Brookwood (Chevrolet)
Dodge Coronet
Firebird (Pontiac)
Galaxie (Ford)
Gremlin (AMC)
Imperial (Chrysler)
Lotus Europa
Mercedes 300 SEL
Toronado (Oldsmobile)
Volkswagen Super Beetle

Data plots are not provided for either the Austin or Volkswagen in VHTP #5, 60 mph. In addition, no VHTP #6 data is provided for the Austin.

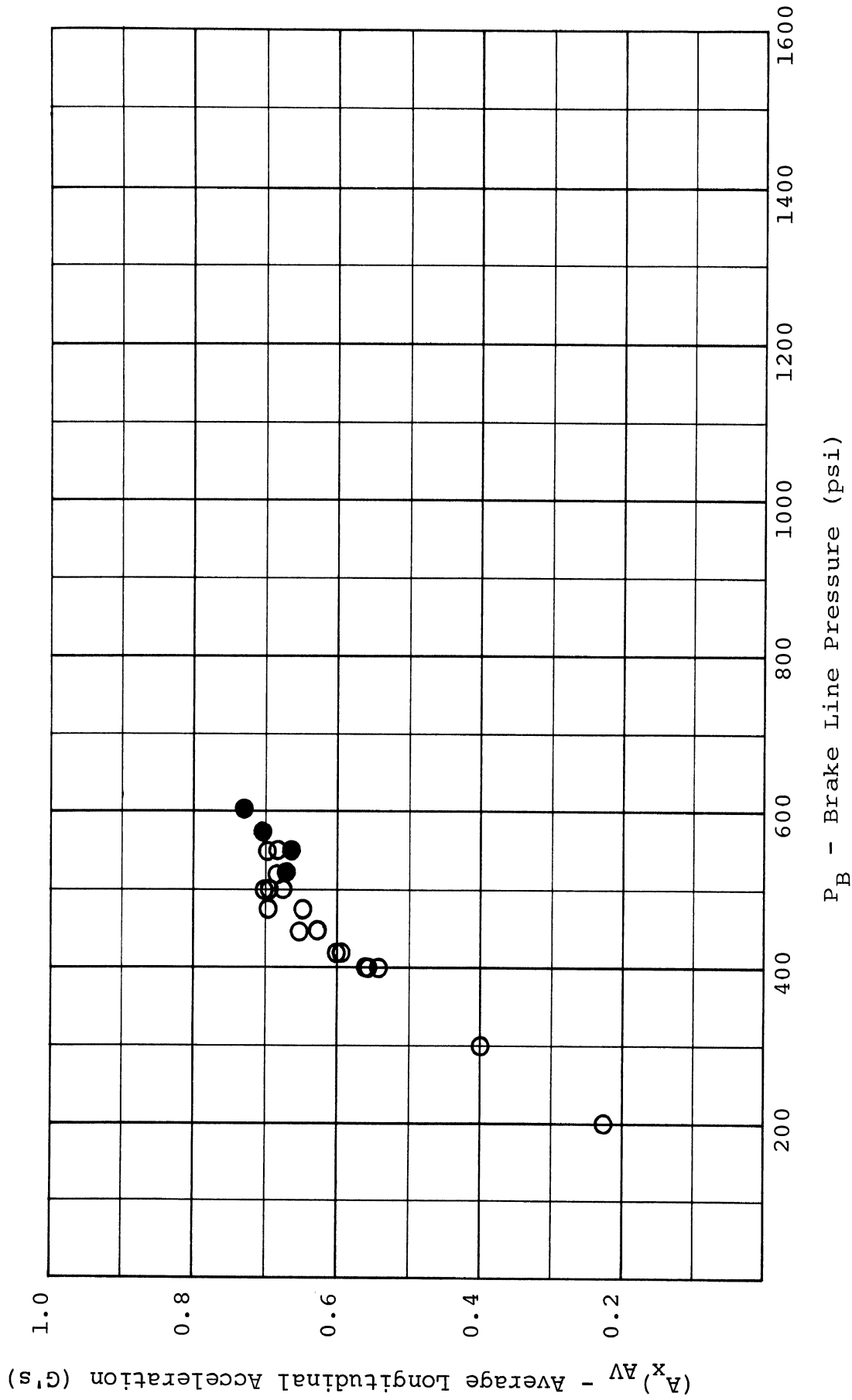
VHTP #1 - STRAIGHT LINE BRAKING

$(A_x)_{ave}$ - Average Deceleration from 35 mph to 10 mph

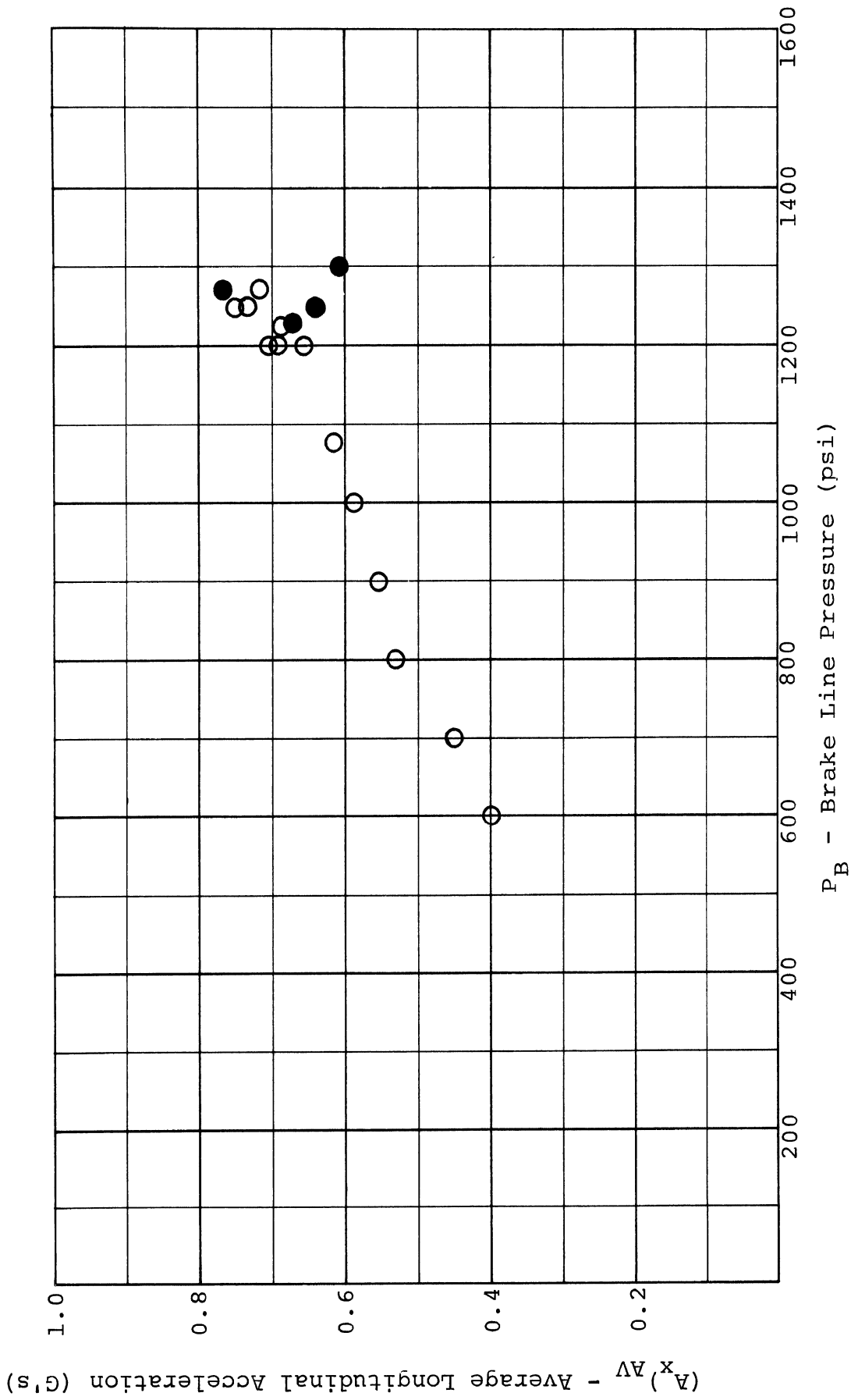
P_B - Brake Line Pressure

● - Indicates 2 Wheels Locked on the Same Axle

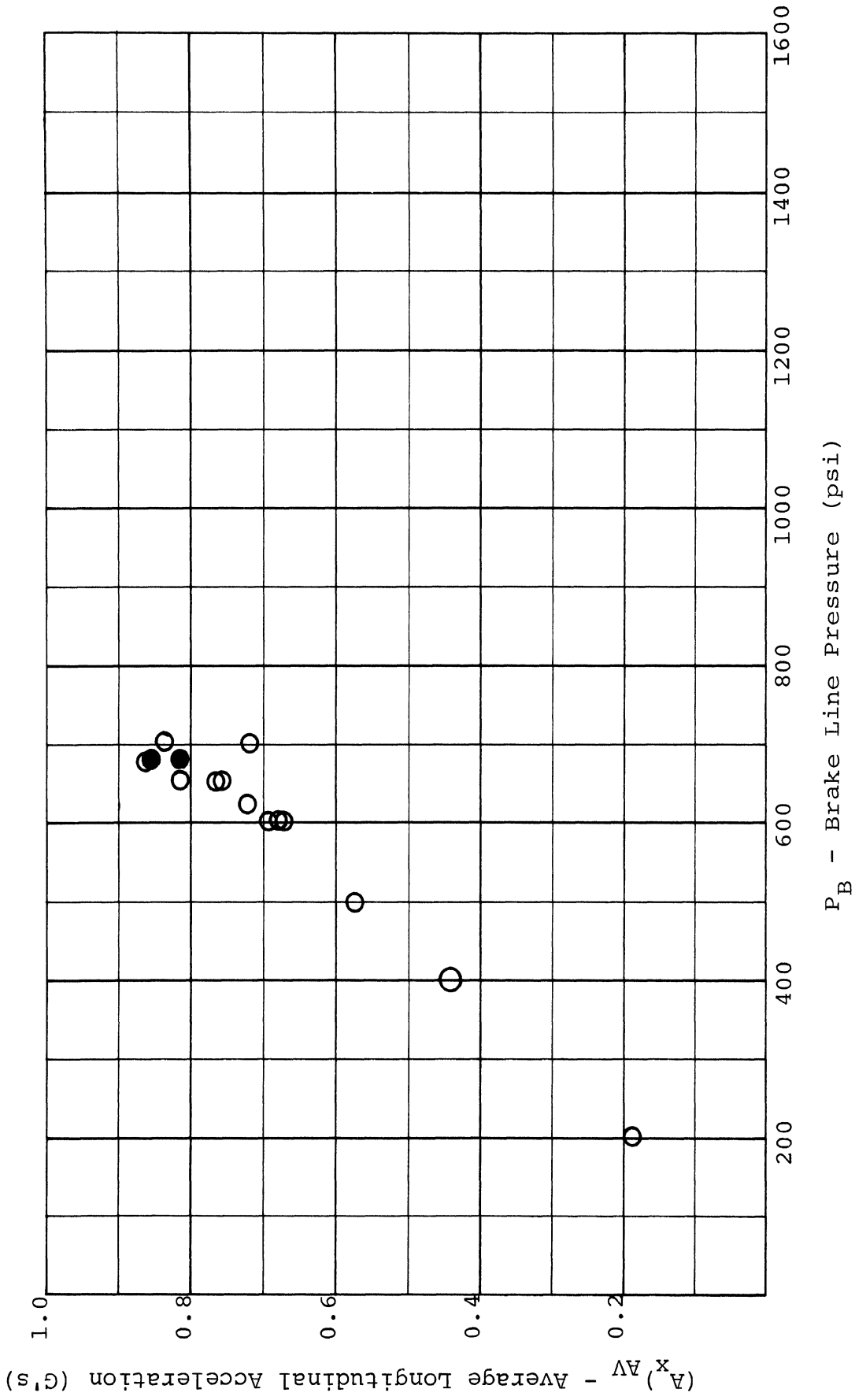
○ - Indicates Fewer Than 2 Wheels Locked on
Either Axle



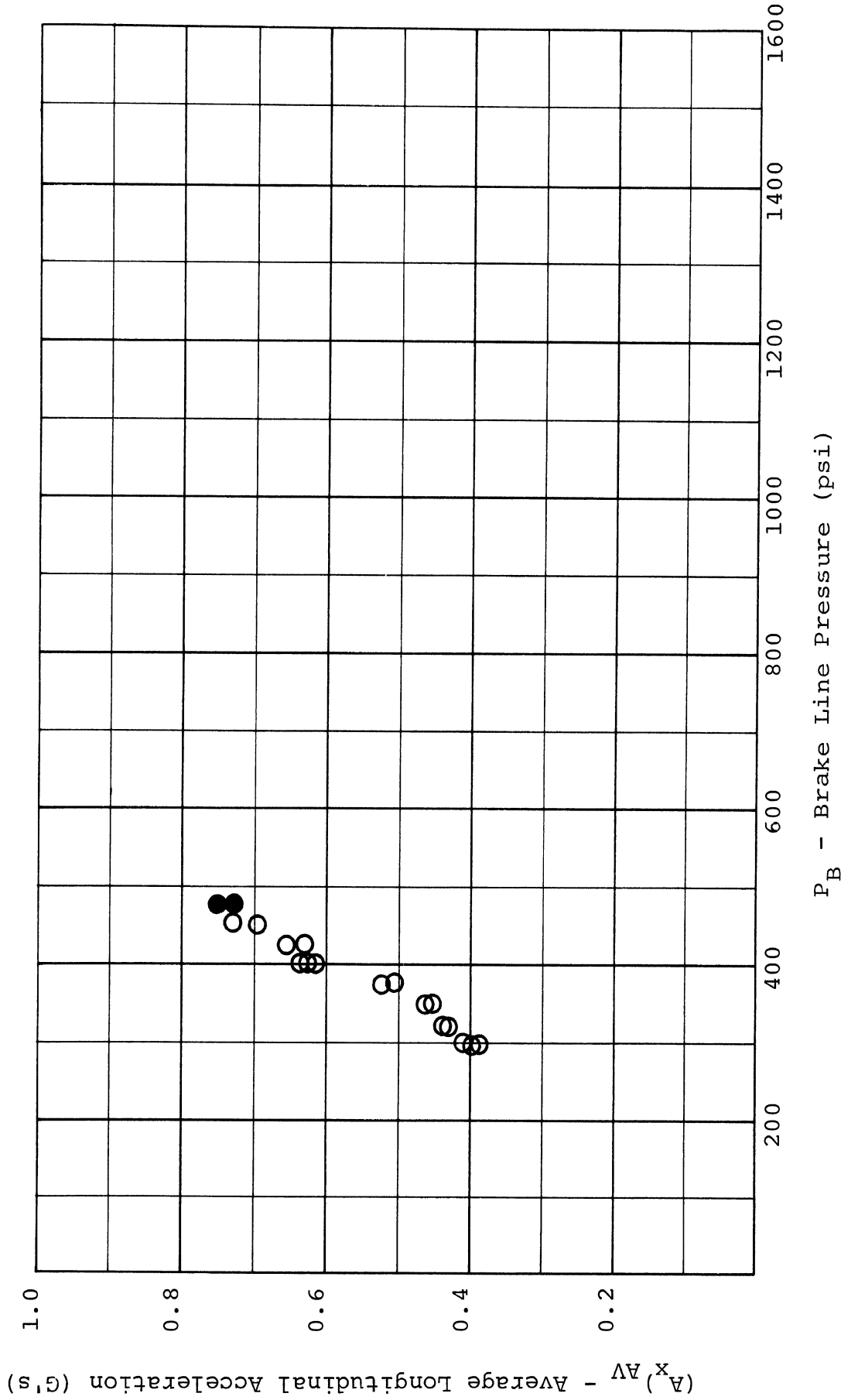
STRAIGHT LINE BRAKING - AMBASSADOR



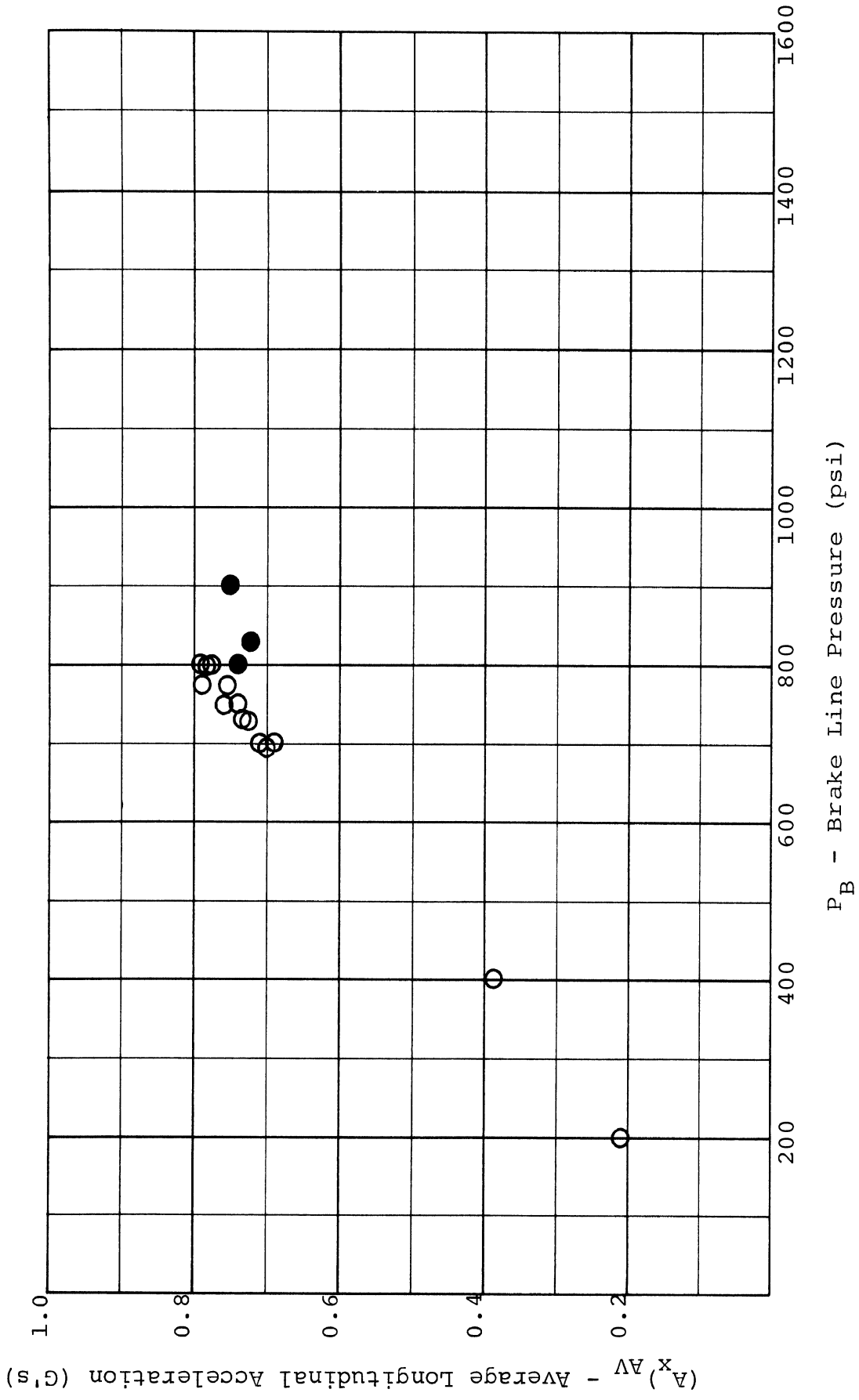
STRAIGHT LINE BRAKING - AUSTIN



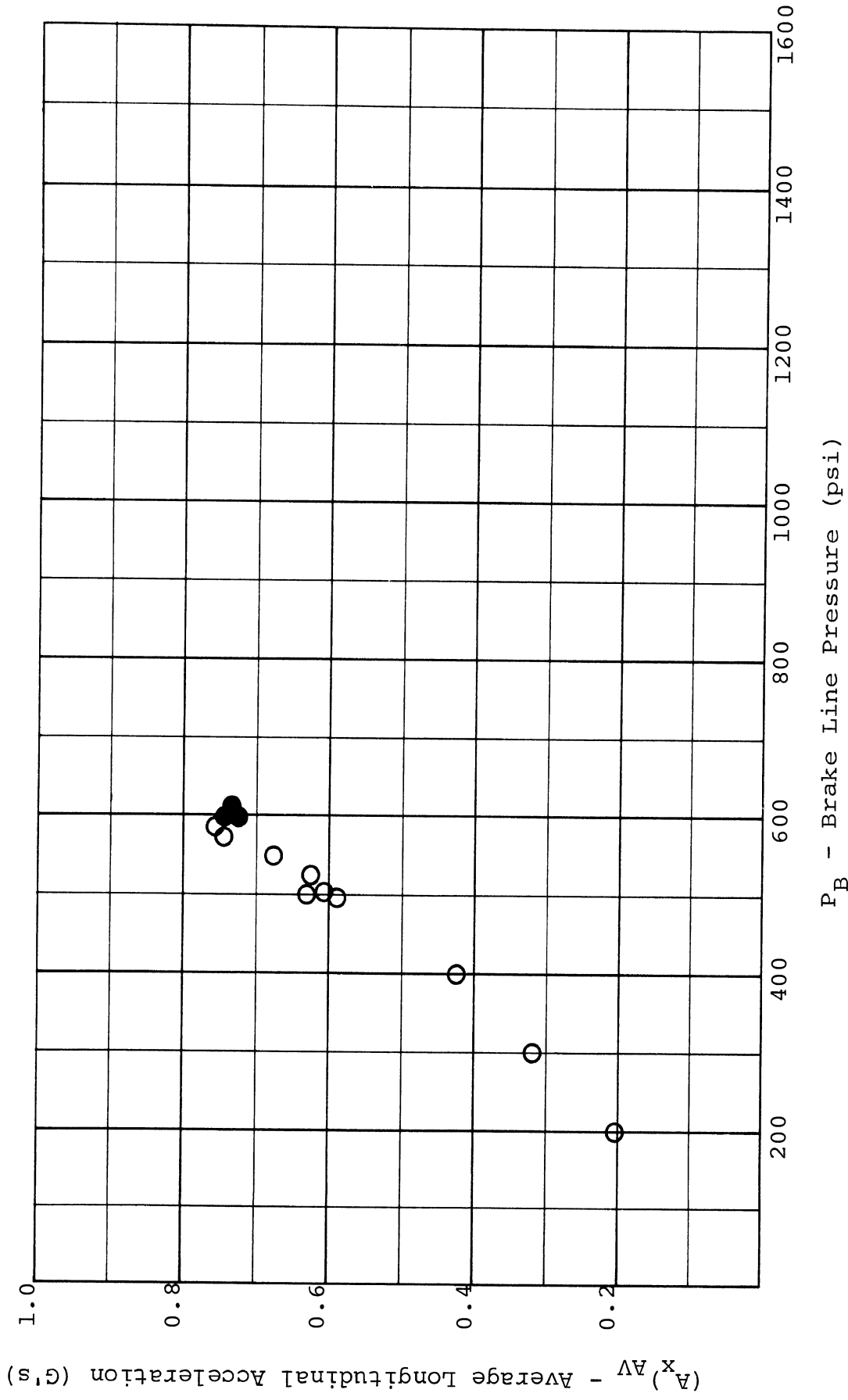
STRAIGHT LINE BRAKING - CHEVROLET



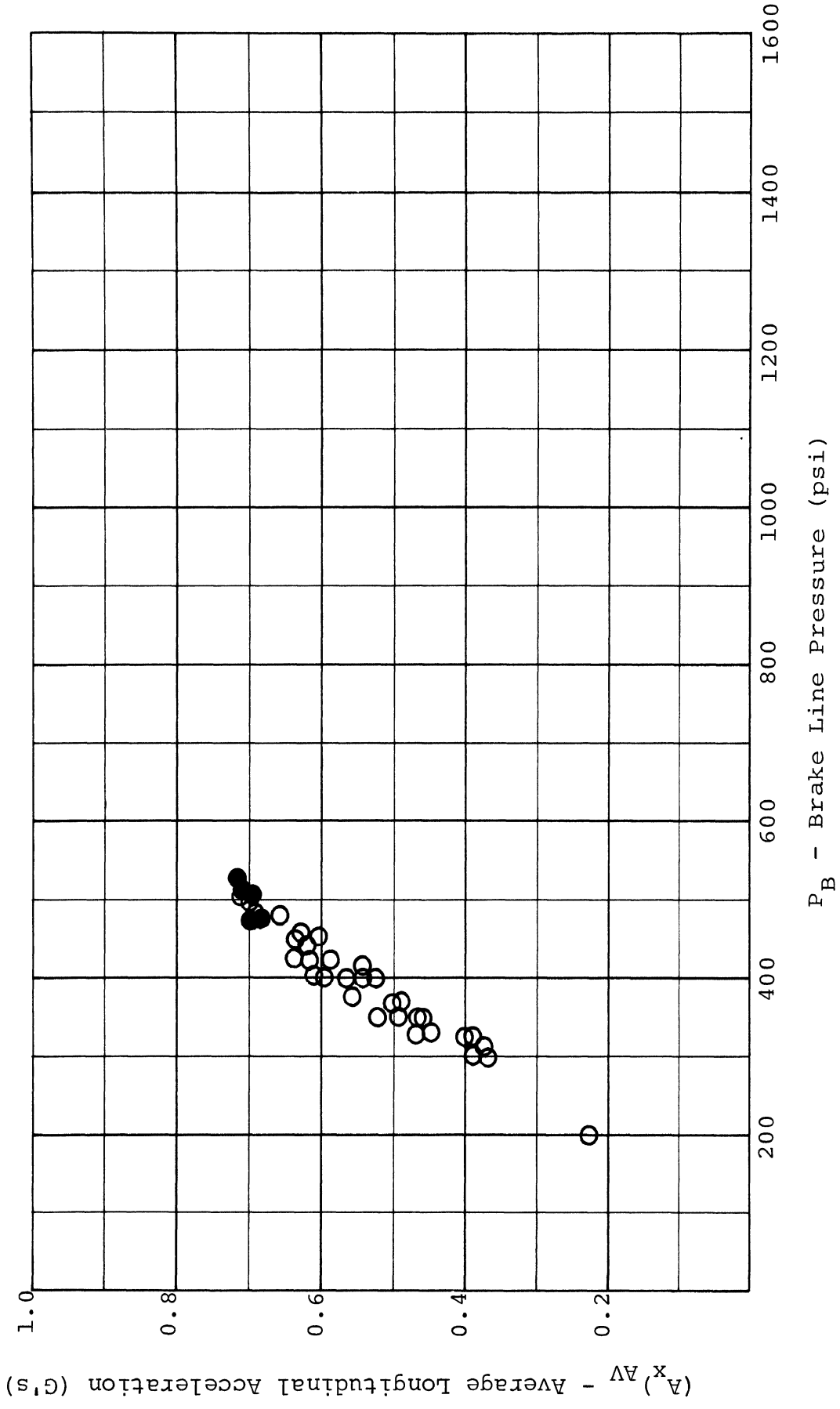
STRAIGHT LINE BRAKING - DODGE



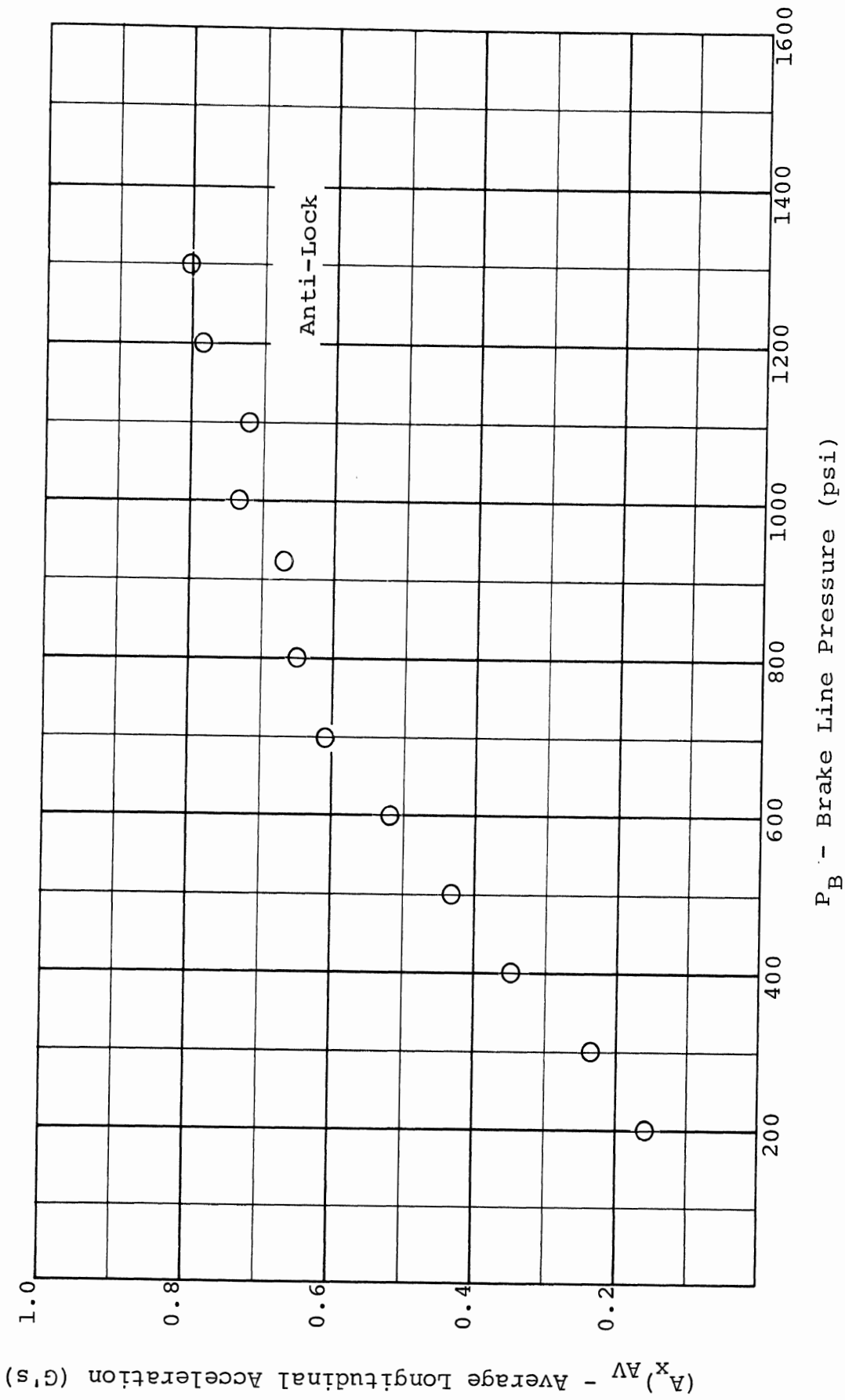
STRAIGHT LINE BRAKING - FIREBIRD TRANS-AM



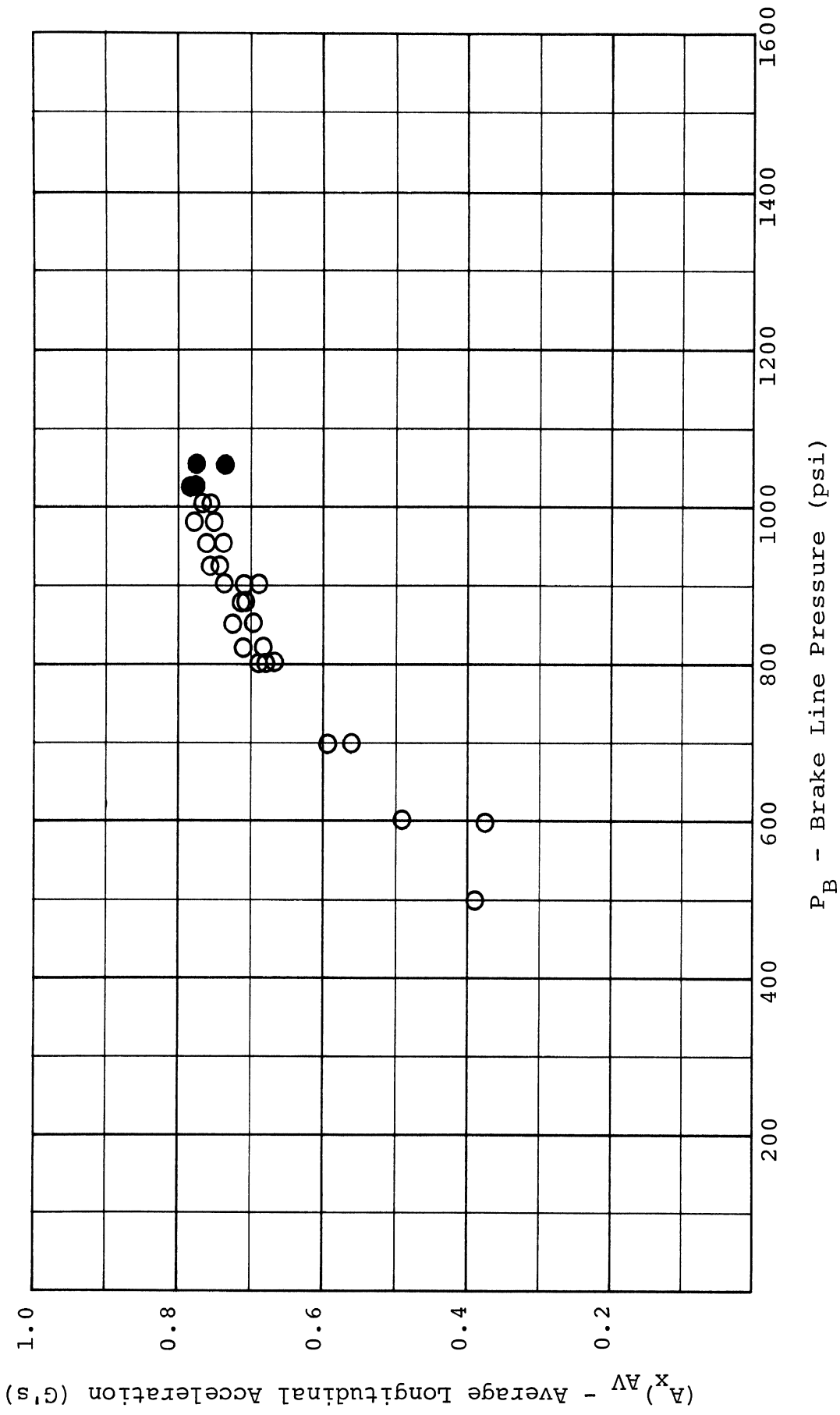
STRAIGHT LINE BRAKING - GALAXIE



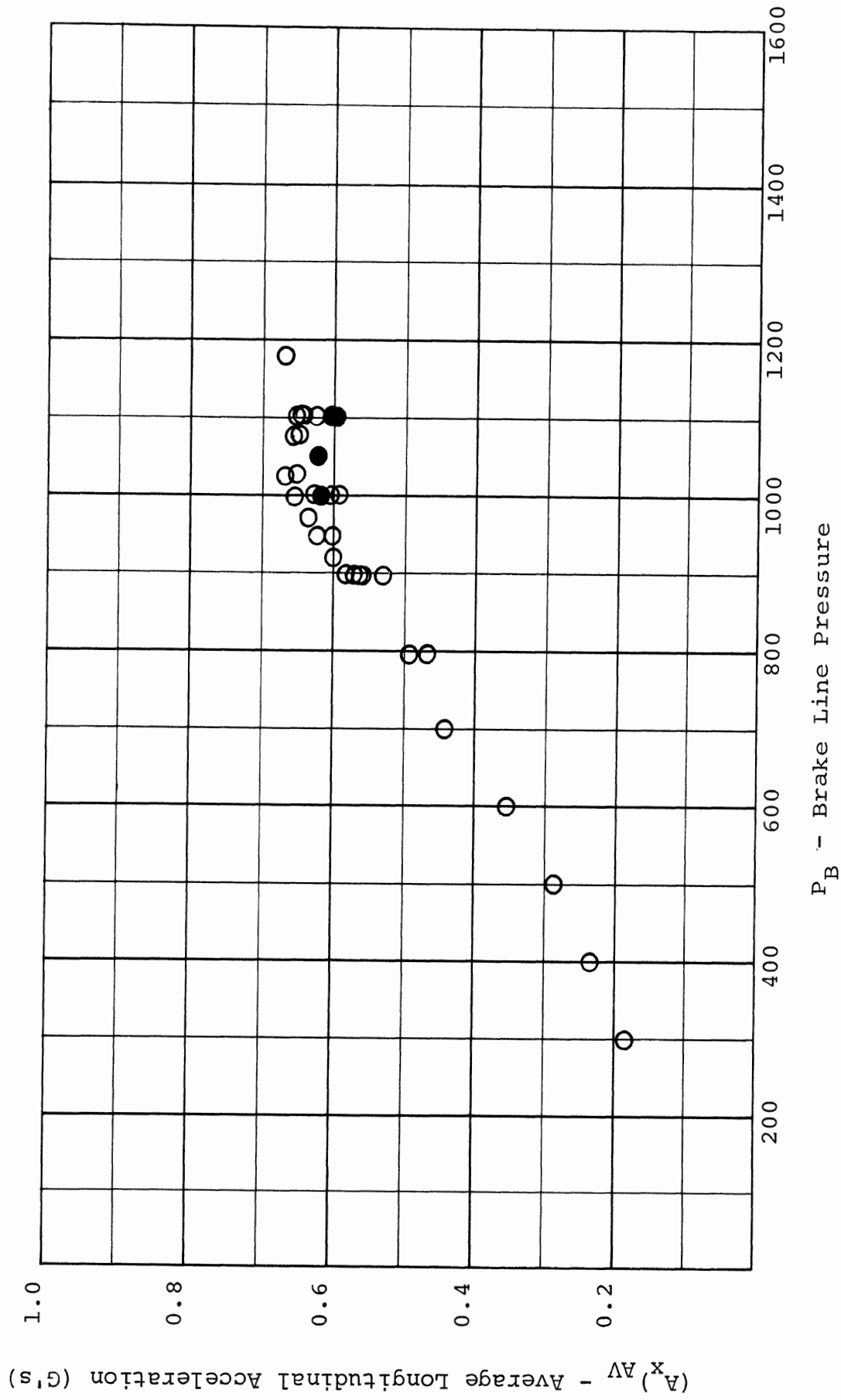
STRAIGHT LINE BRAKING - GREMLIN



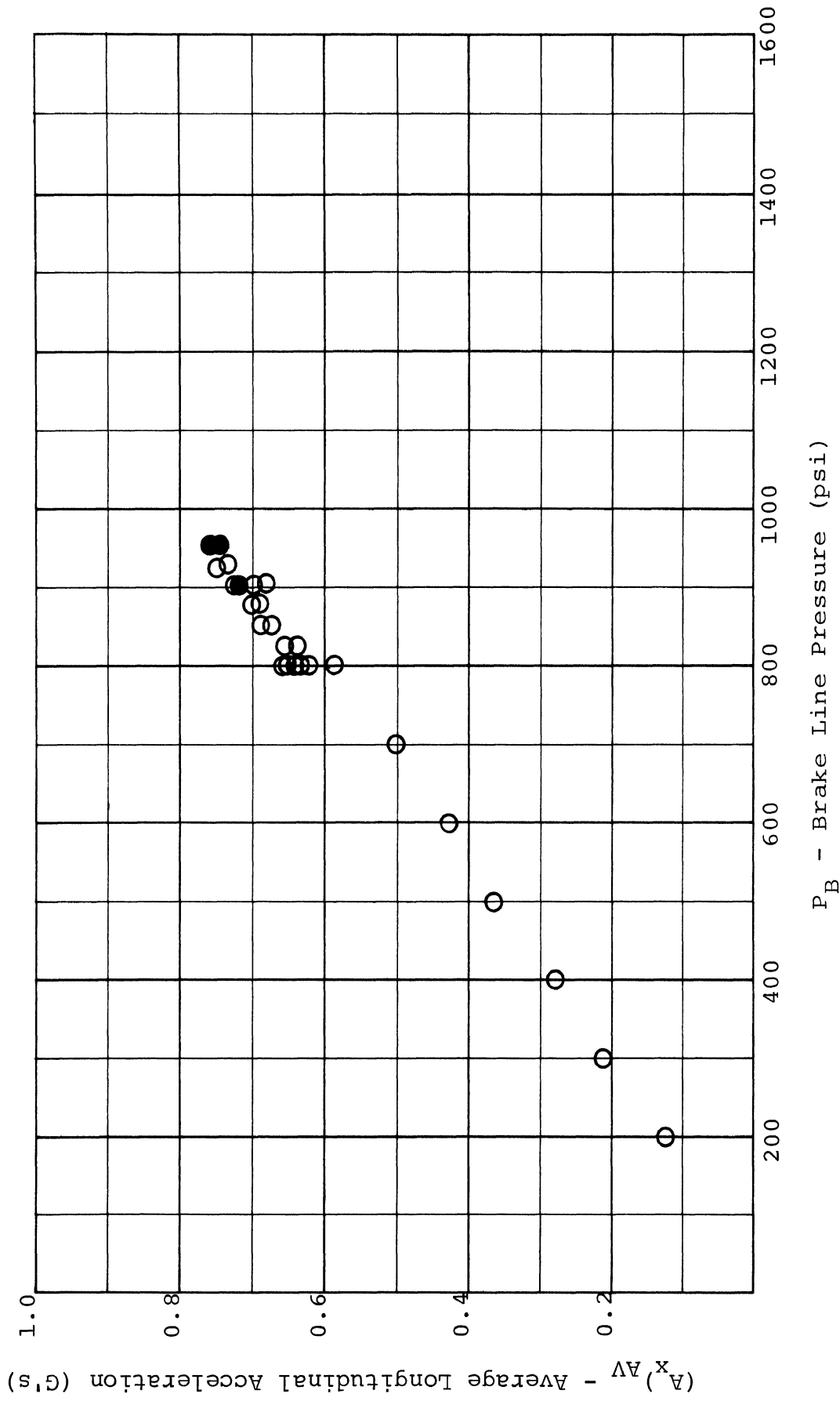
STRAIGHT LINE BRAKING - IMPERIAL



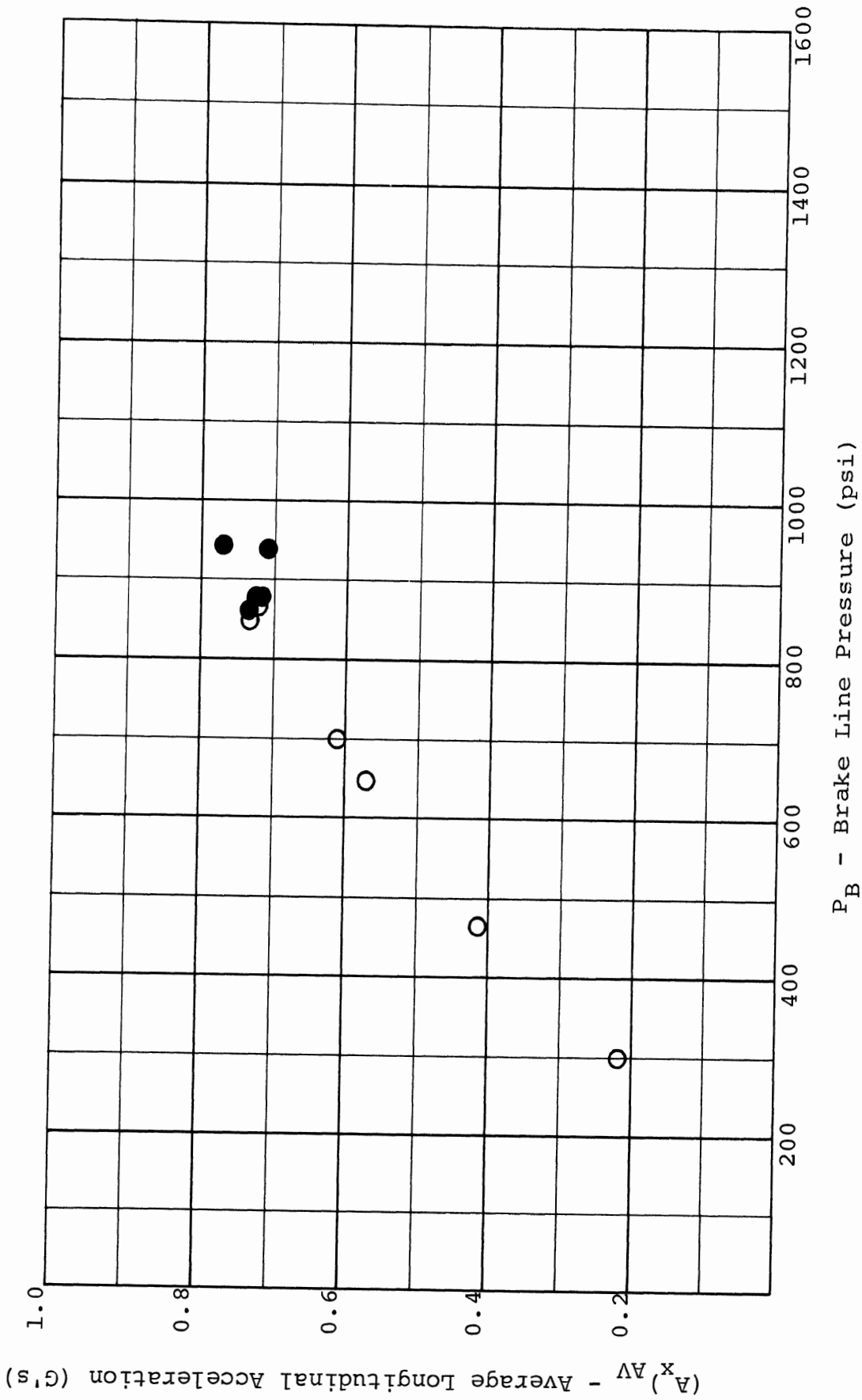
STRAIGHT LINE BRAKING - LOTUS



STRAIGHT LINE BRAKING - MERCEDES



STRAIGHT LINE BRAKING - TORONADO



STRAIGHT LINE BRAKING - VOLKSWAGEN

VHTP #2 - BRAKING IN A TURN

$(A_x)_{ave}$ - Average Deceleration from 35 mph to 10 mph

P_B - Brake Line Pressure

β_p - Peak Vehicle Sideslip Angle

$\dot{\beta}_p$ - Peak Vehicle Sideslip Angle Rate

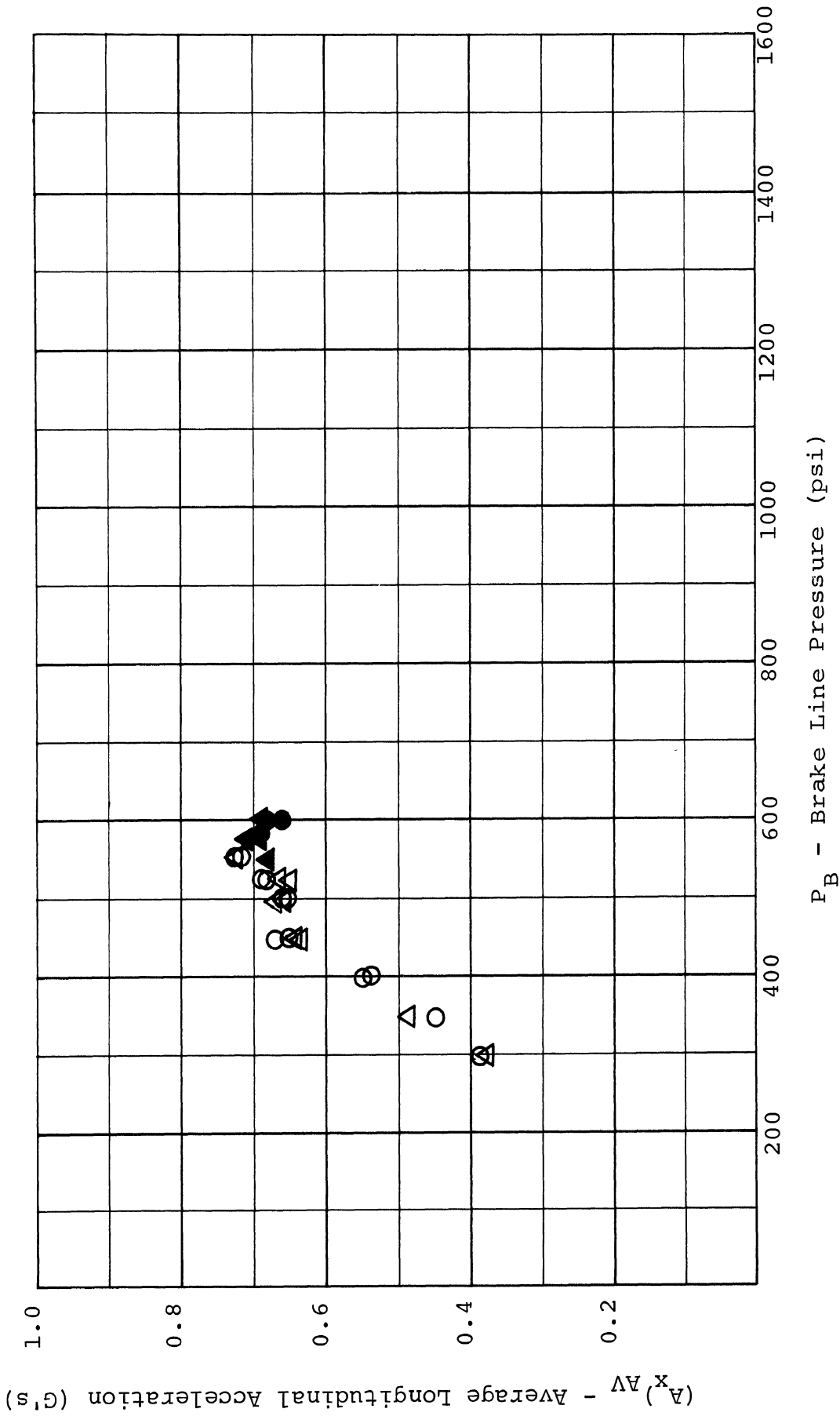
$R_o(1/R)$ - Average Path Curvature Ratio Relative to
Initial Turn

○ - Indicates Right Turn - Fewer Than 2 Wheels
Locked On Any Axle

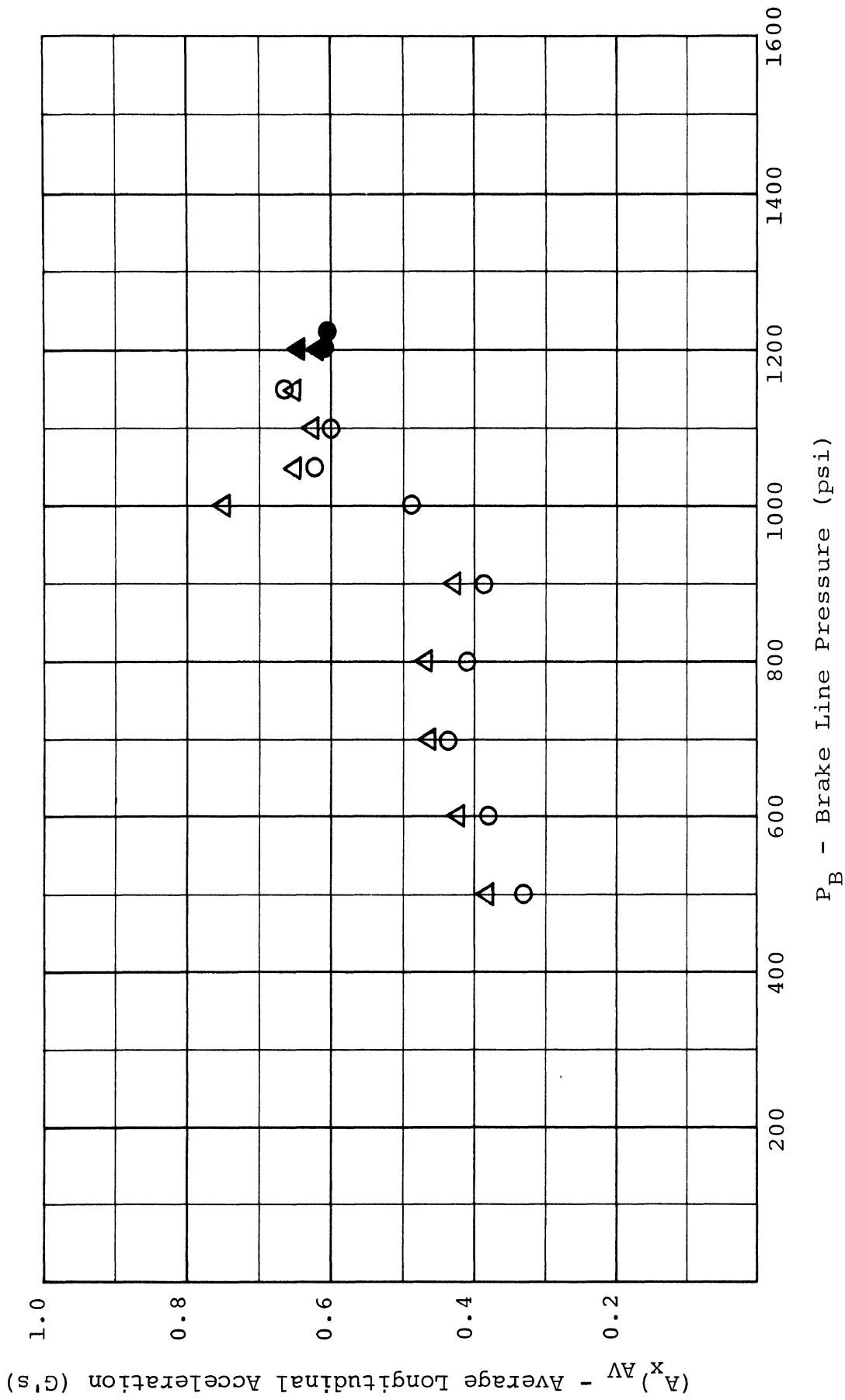
△ - Indicates Left Turn - Fewer Than 2 Wheels
Locked On Any Axle

● - Indicates Right Turn - 2 Wheels Locked On
One Axle

▲ - Indicates Left Turn - 2 Wheels Locked On
One Axle

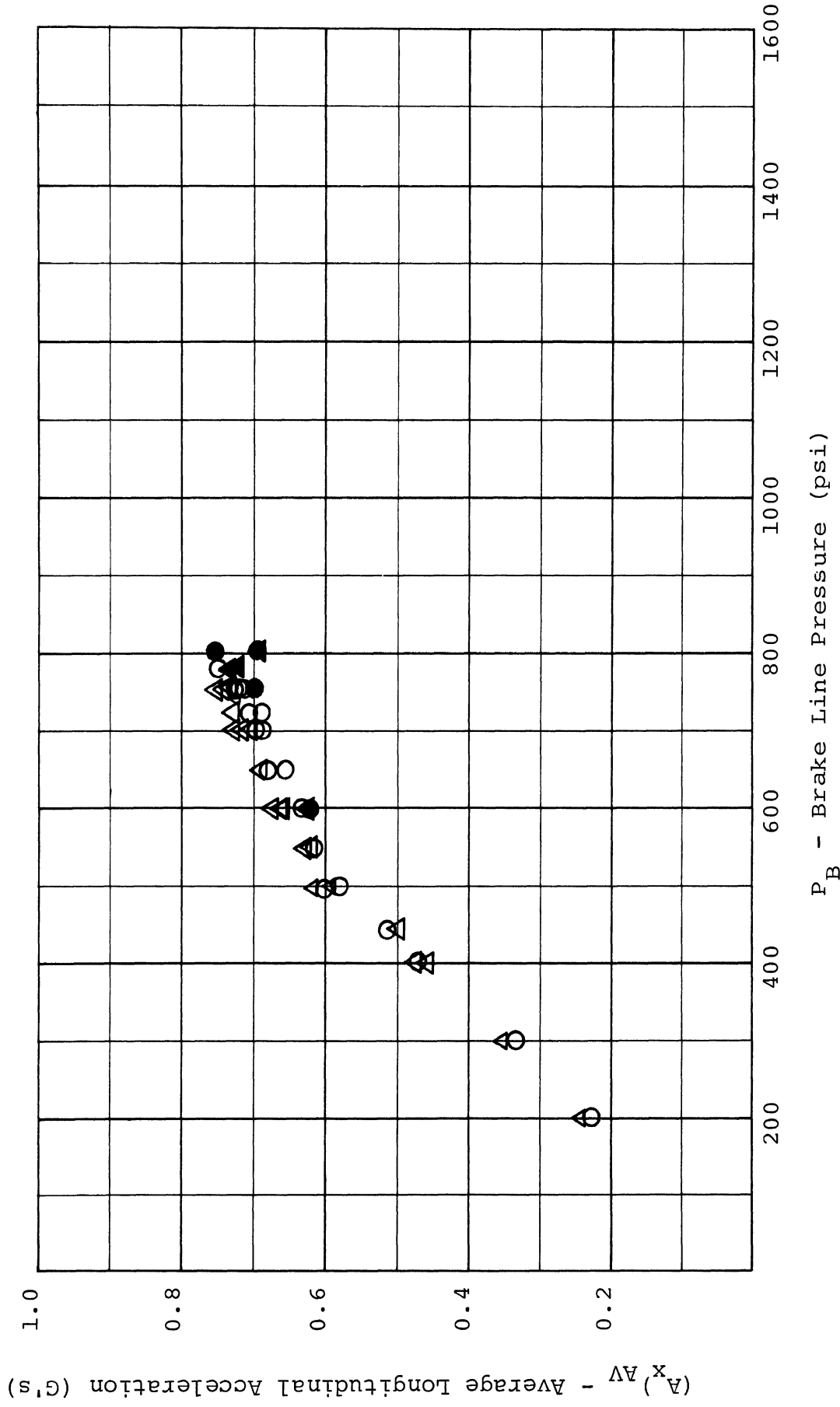


BRAKING IN A TURN - AMBASSADOR

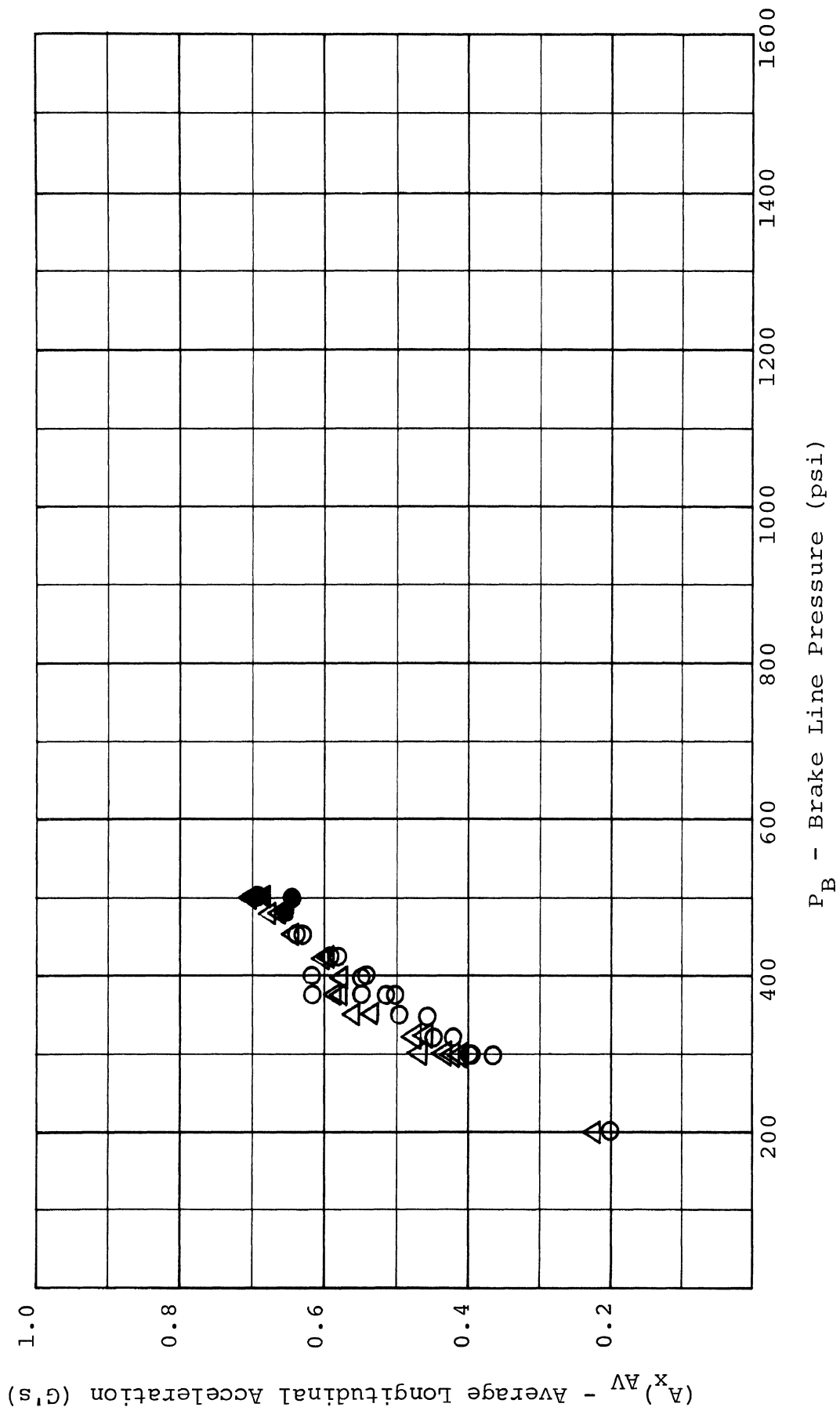


P_B - Brake Line Pressure (psi)

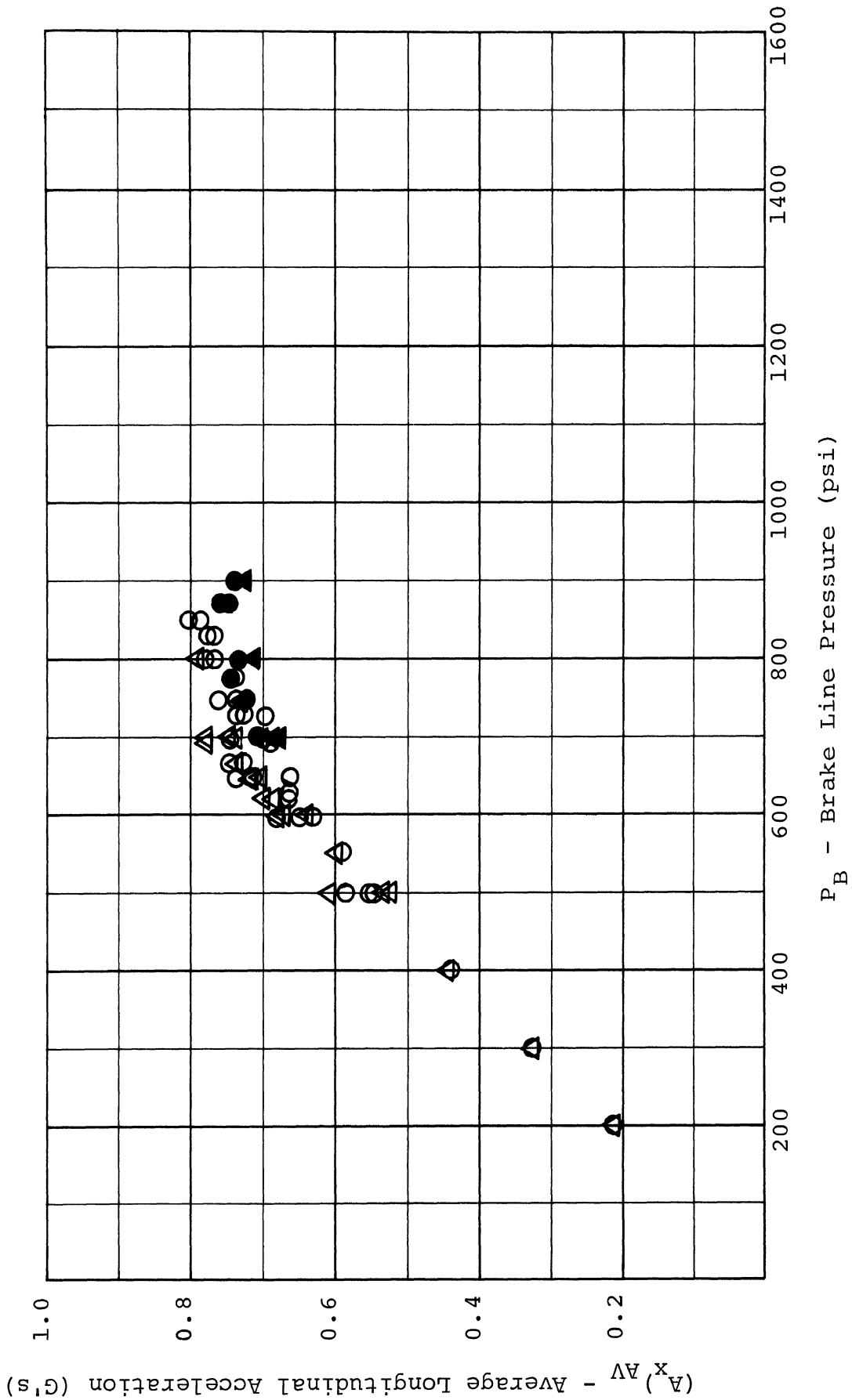
BRAKING IN A TURN - AUSTIN



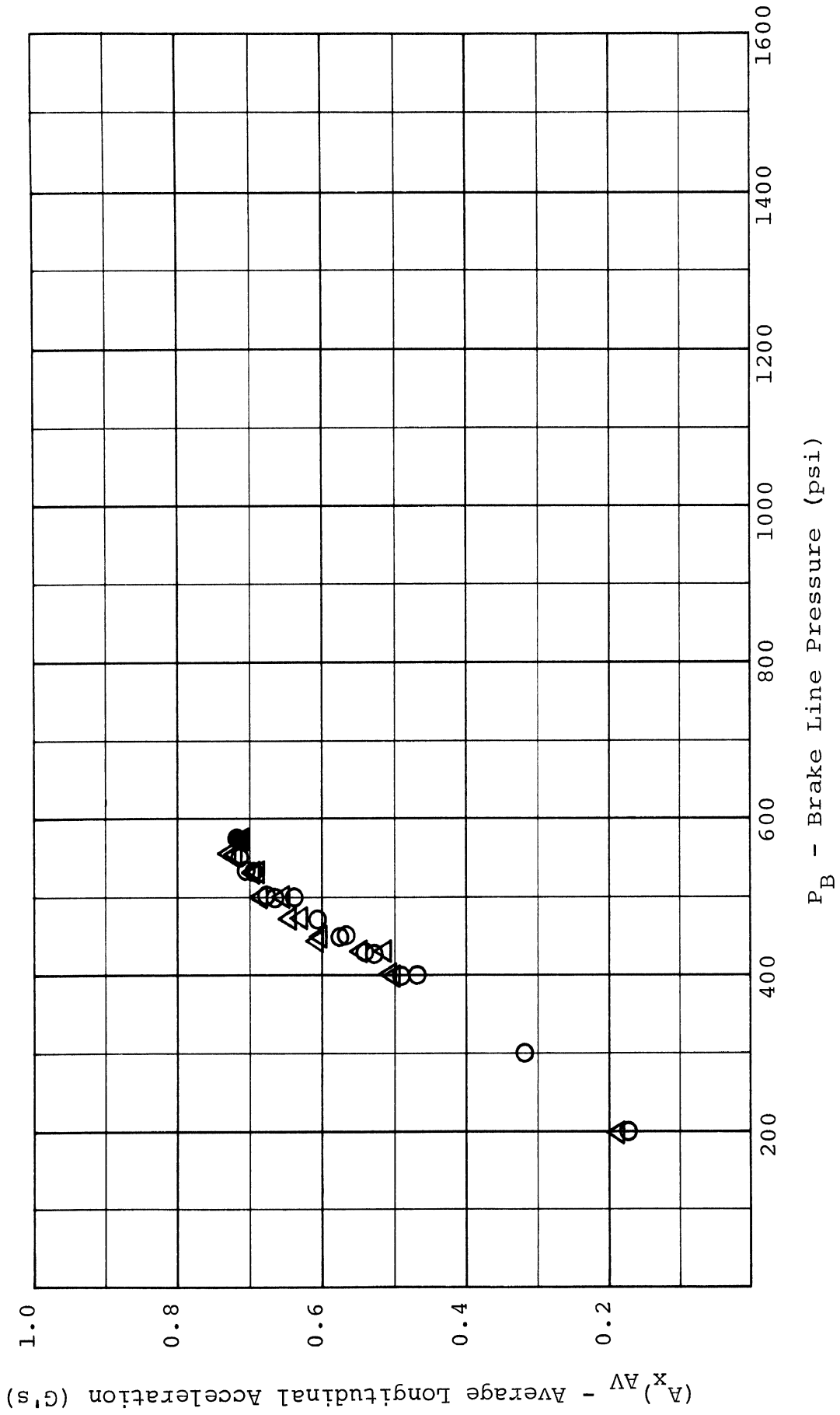
BRAKING IN A TURN - CHEVROLET



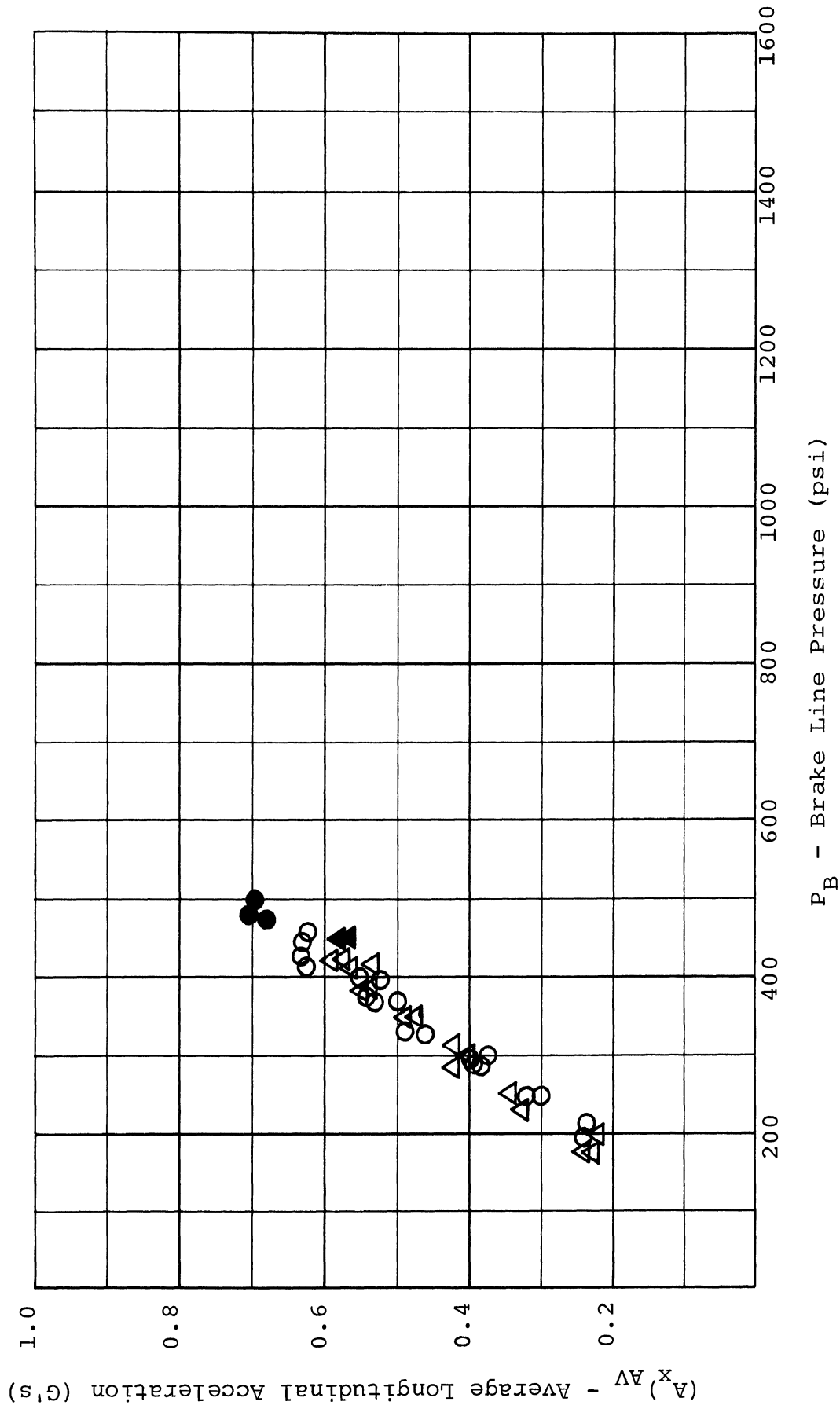
BRAKING IN A TURN - DODGE



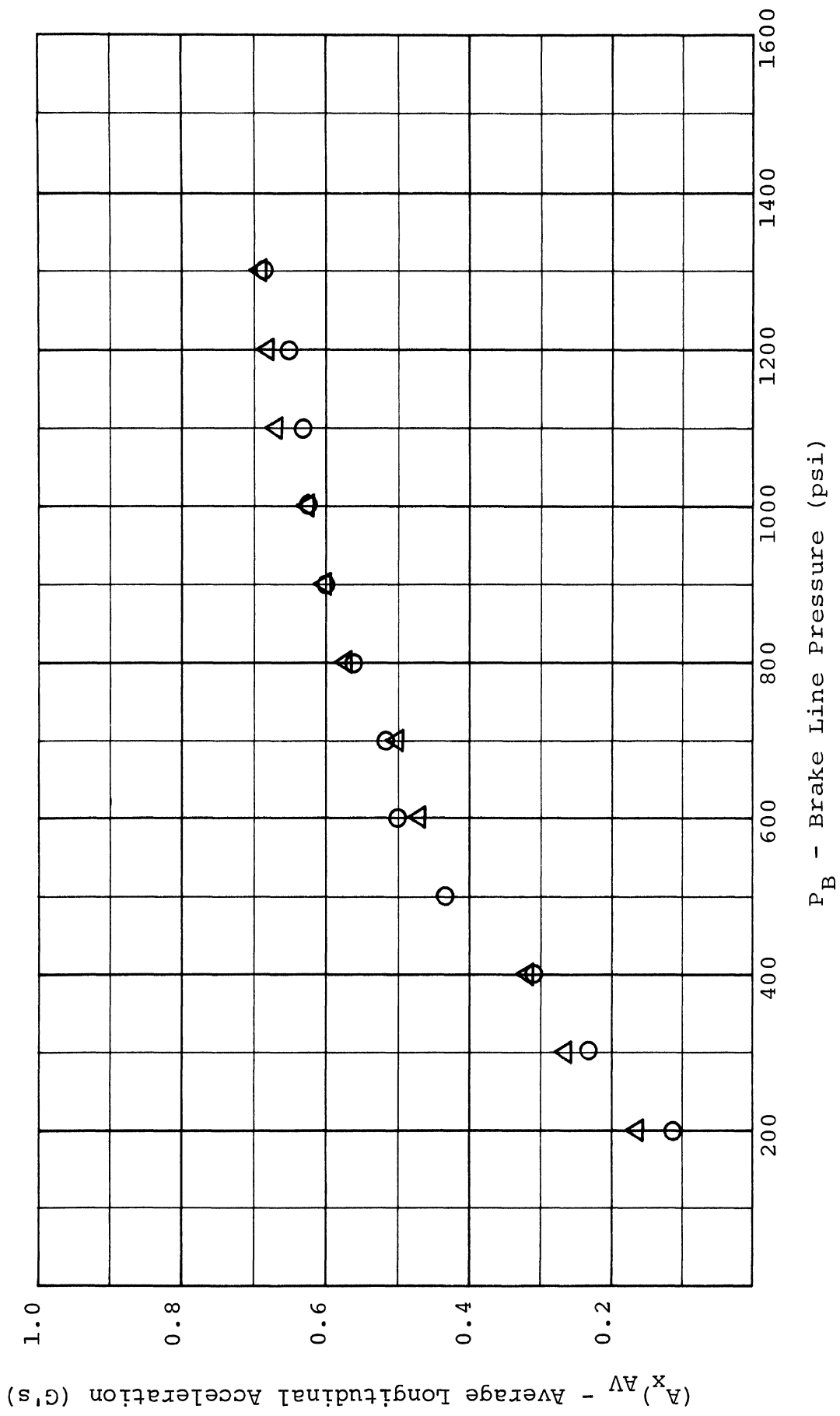
BRAKING IN A TURN - FIREBIRD TRANS-AM



BRAKING IN A TURN - GALAXIE

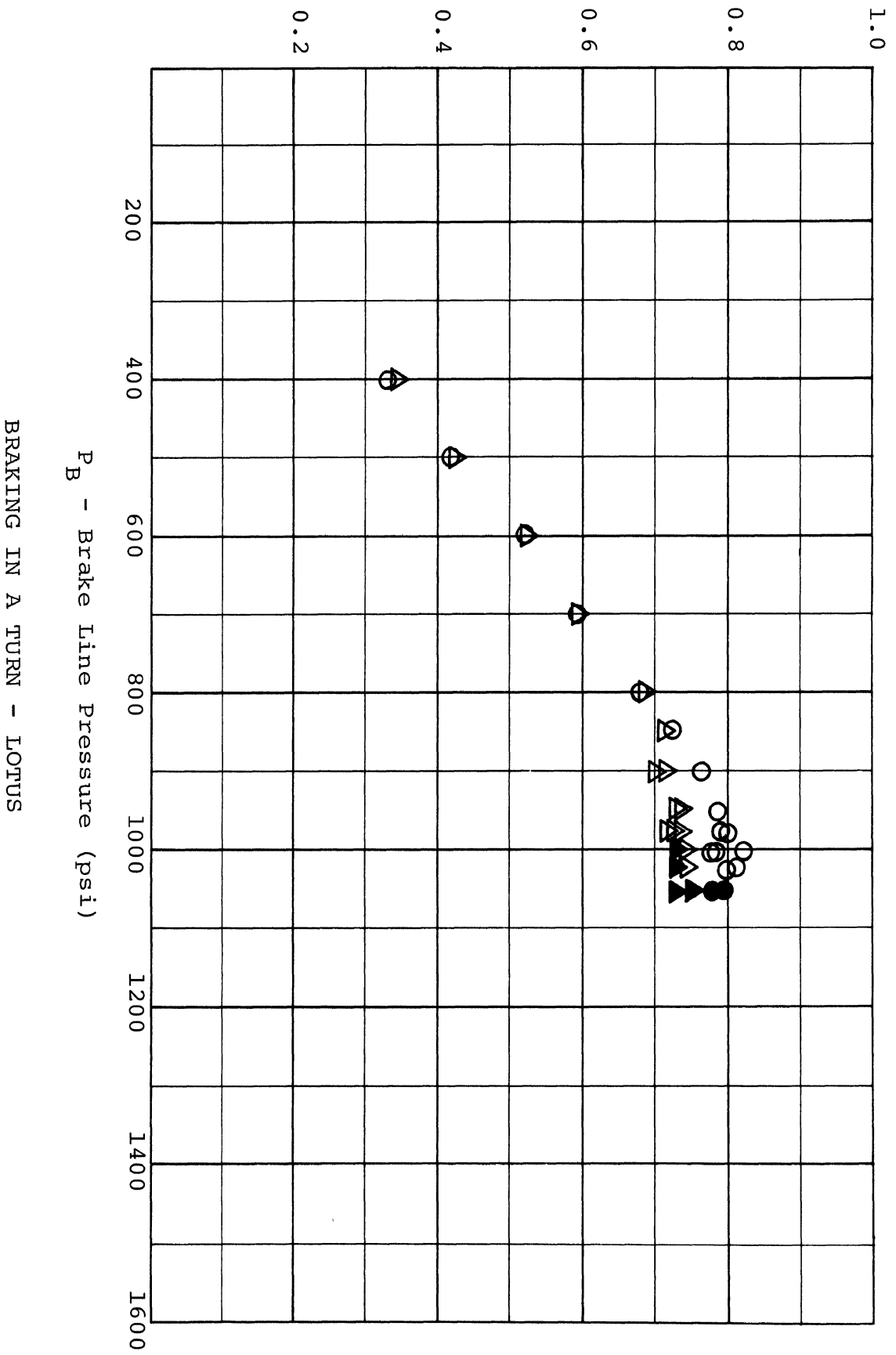


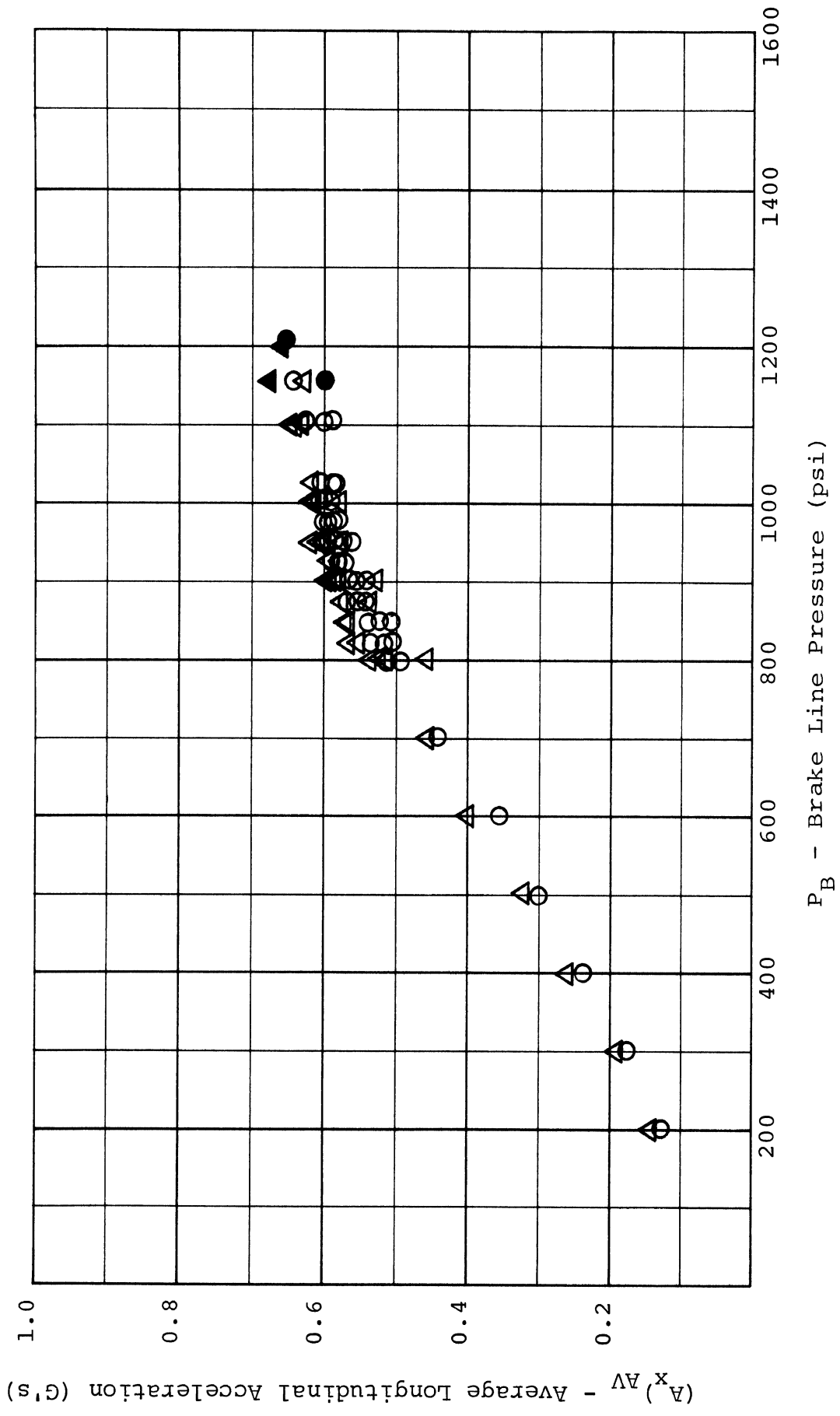
BRAKING IN A TURN - GREMLIN



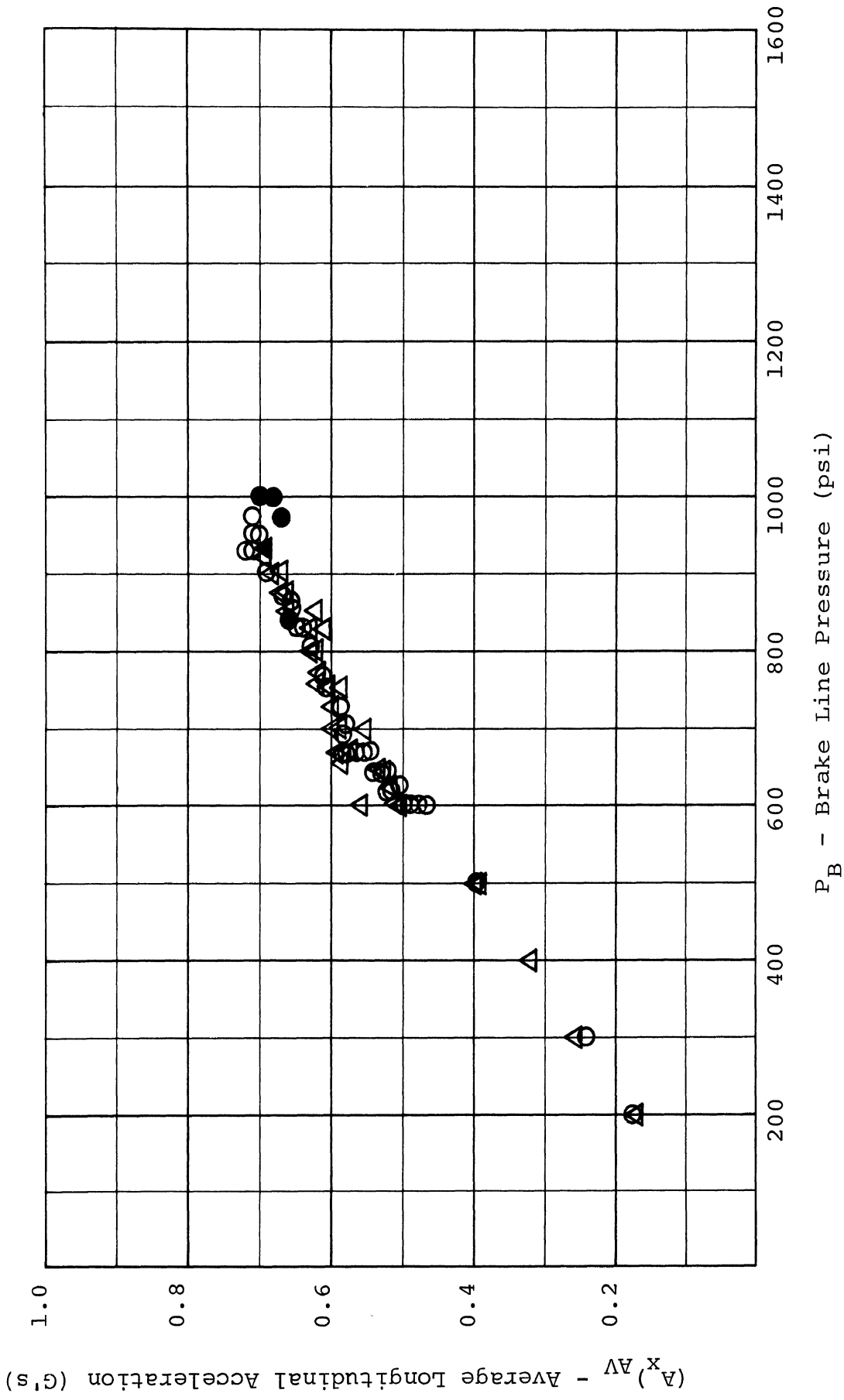
BRAKING IN A TURN - IMPERIAL

$(A_x)_{AV}$ - Average Longitudinal Acceleration (G's)

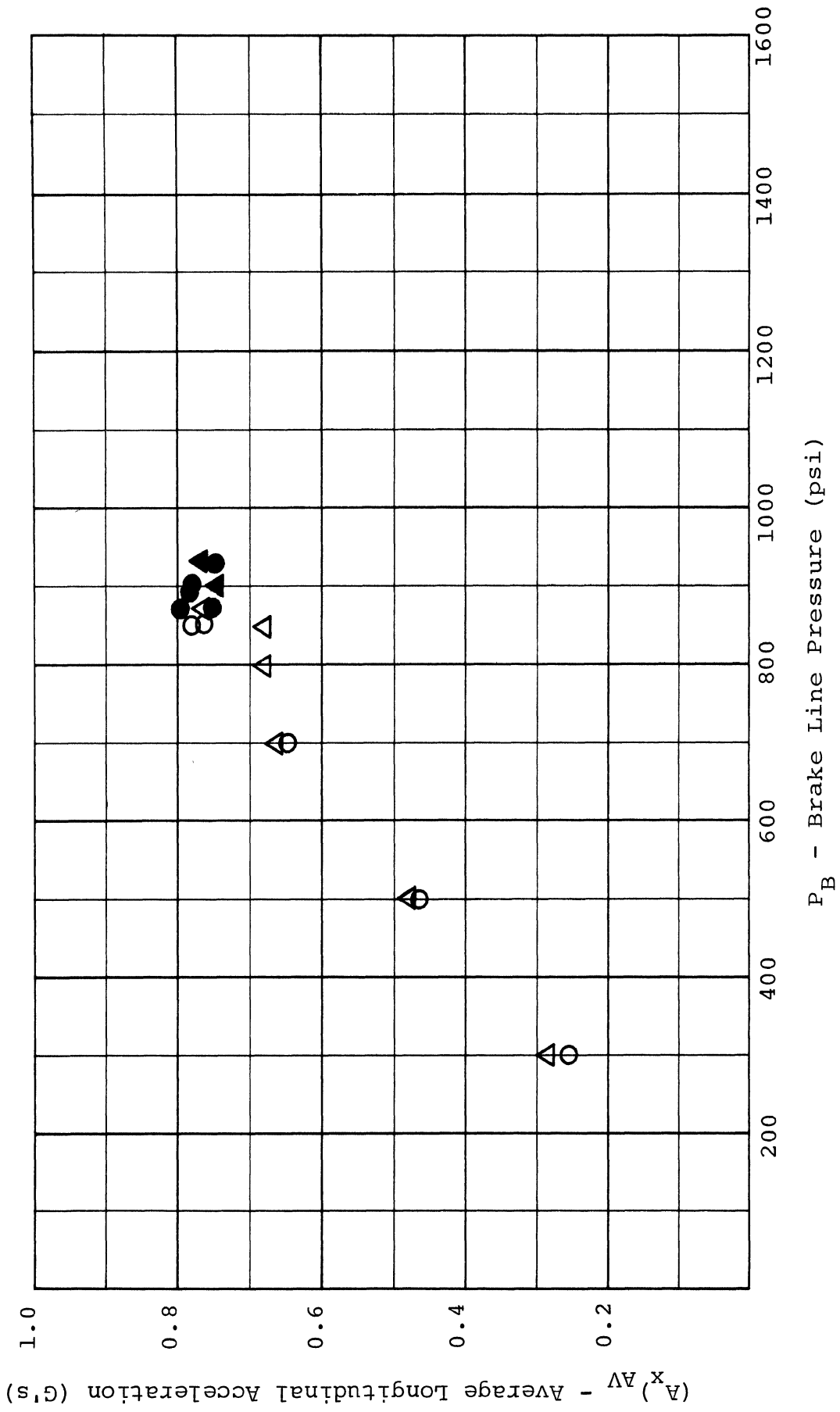




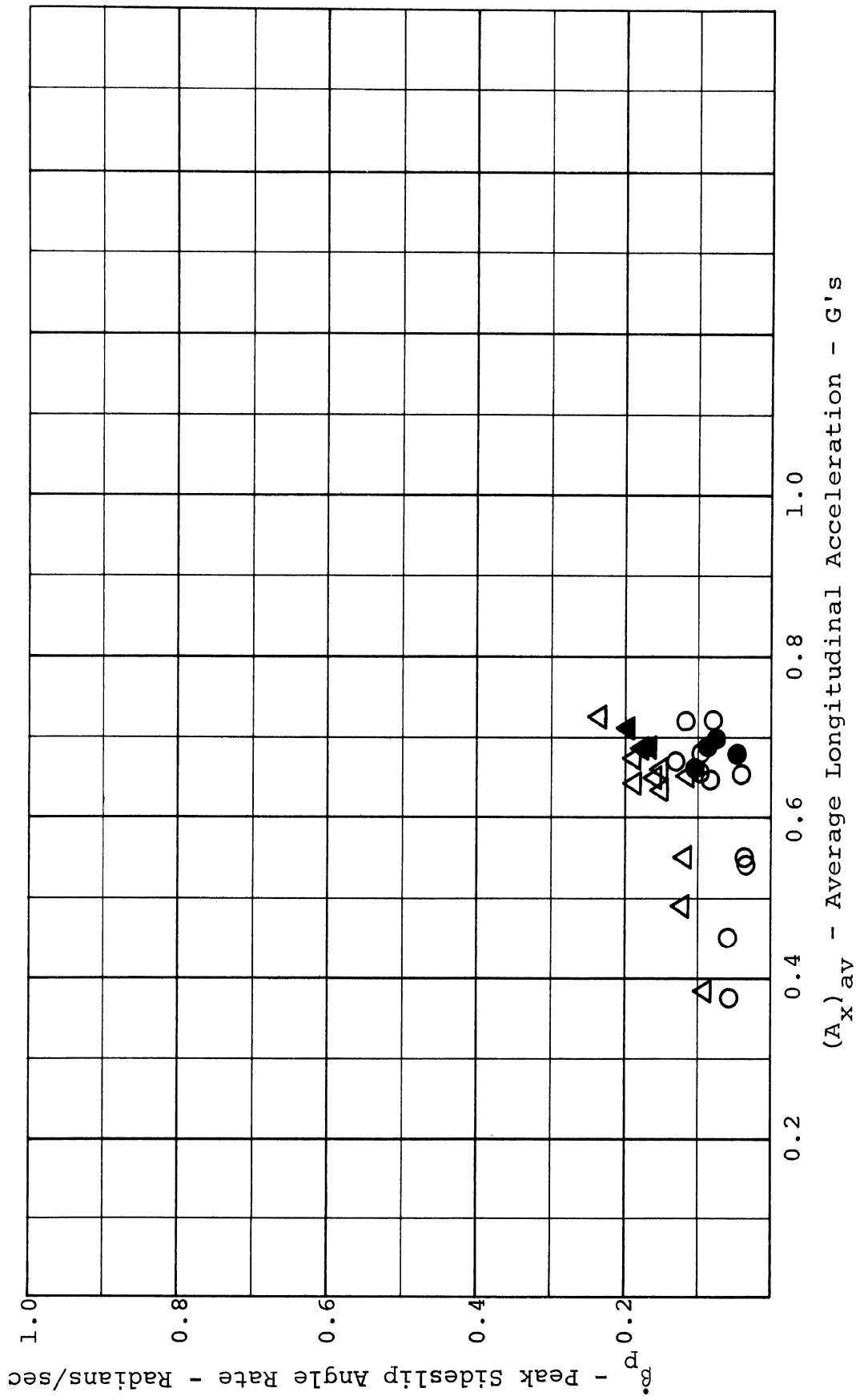
BRAKING IN A TURN - MERCEDES



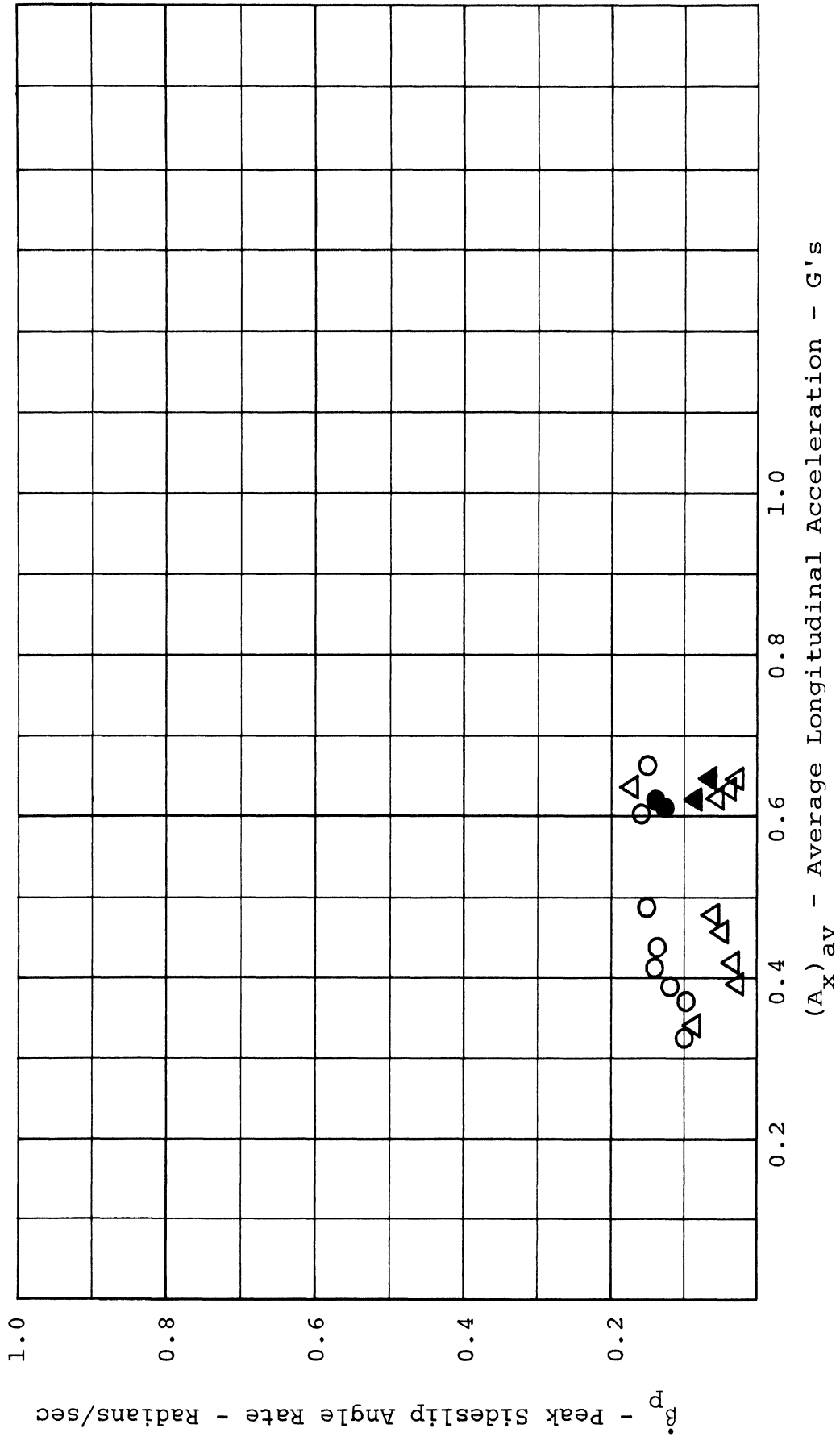
BRAKING IN A TURN - TORONADO



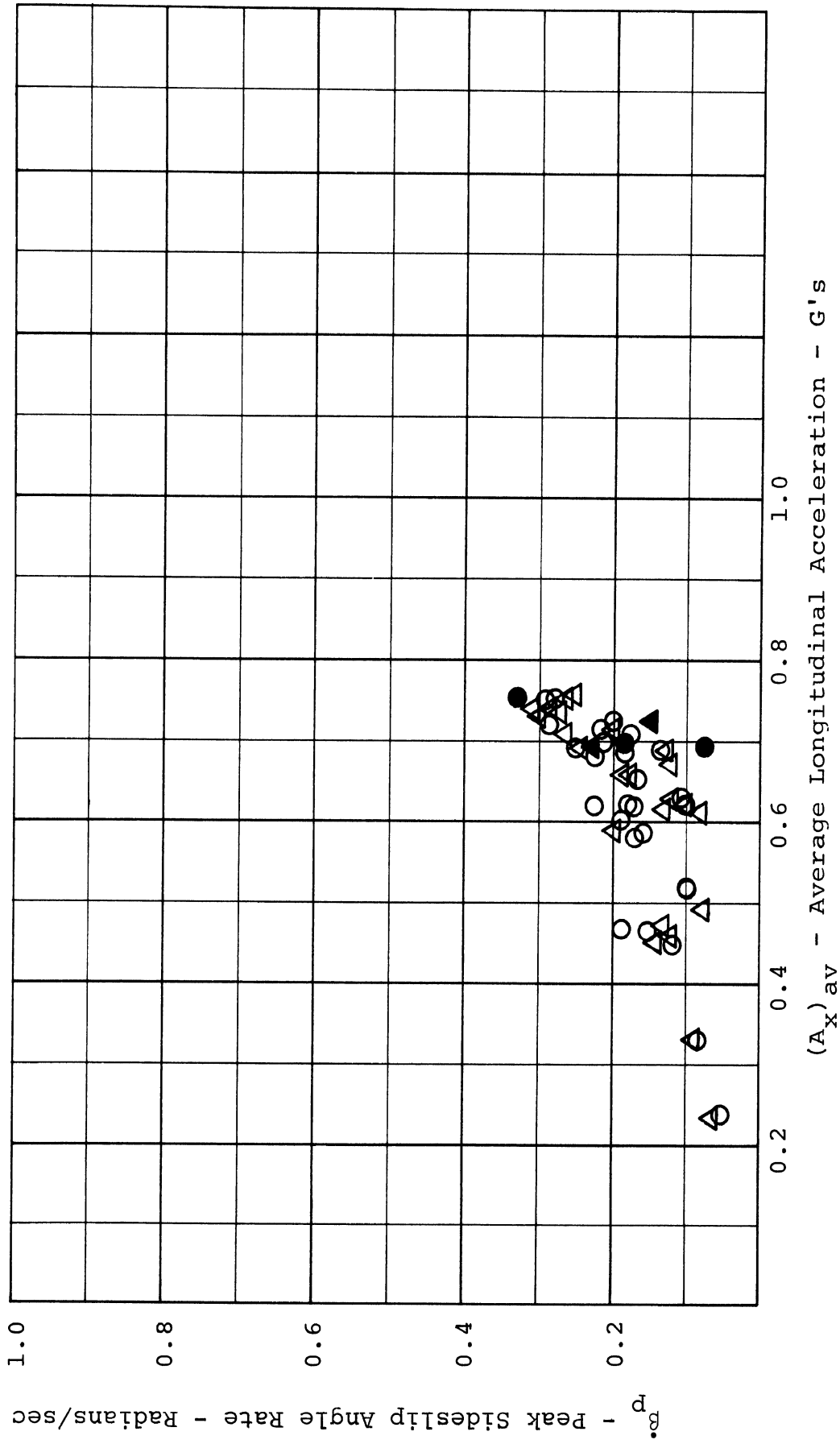
BRAKING IN A TURN - VOLKSWAGEN



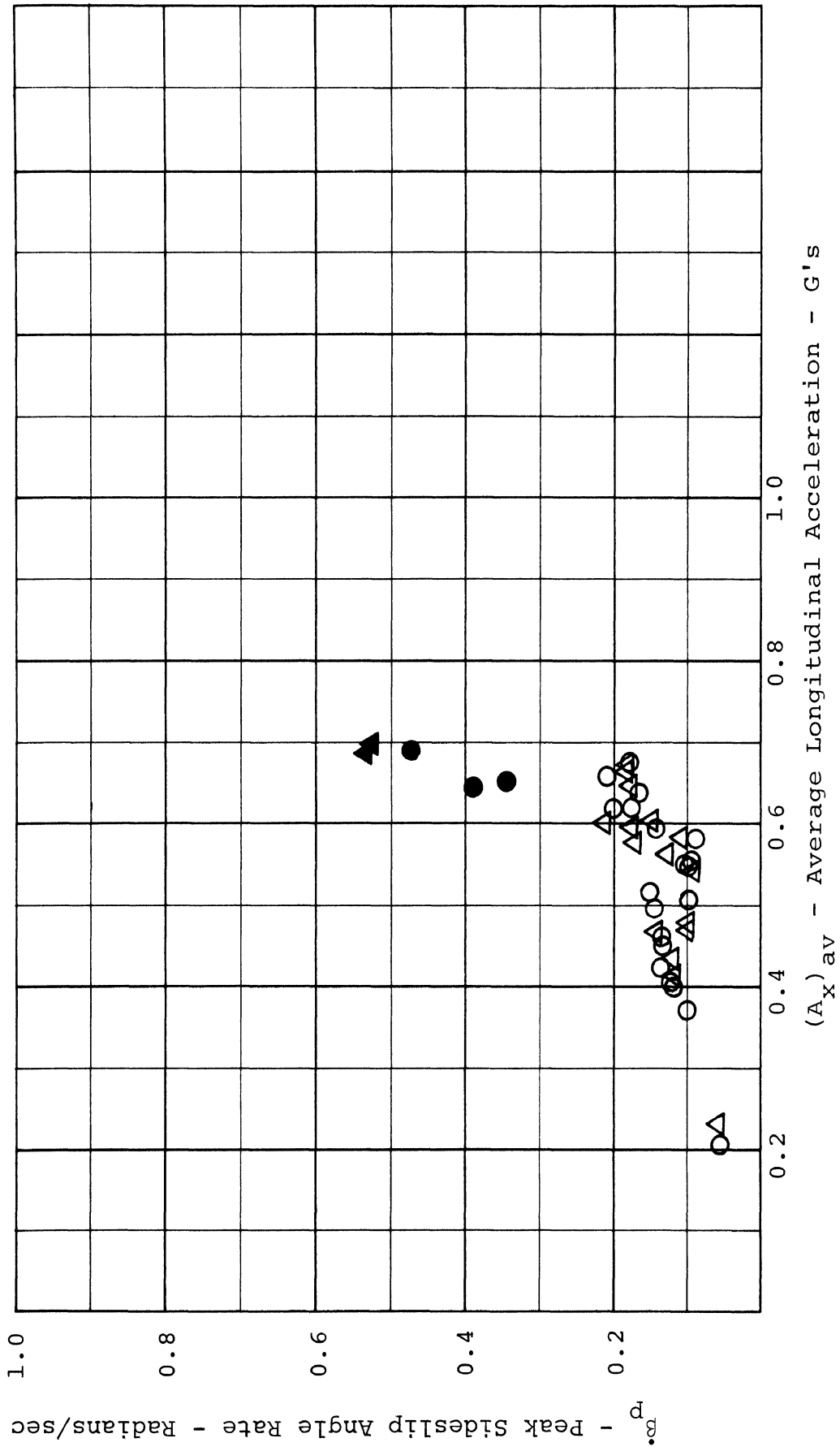
BRAKING IN A TURN - AMBASSADOR



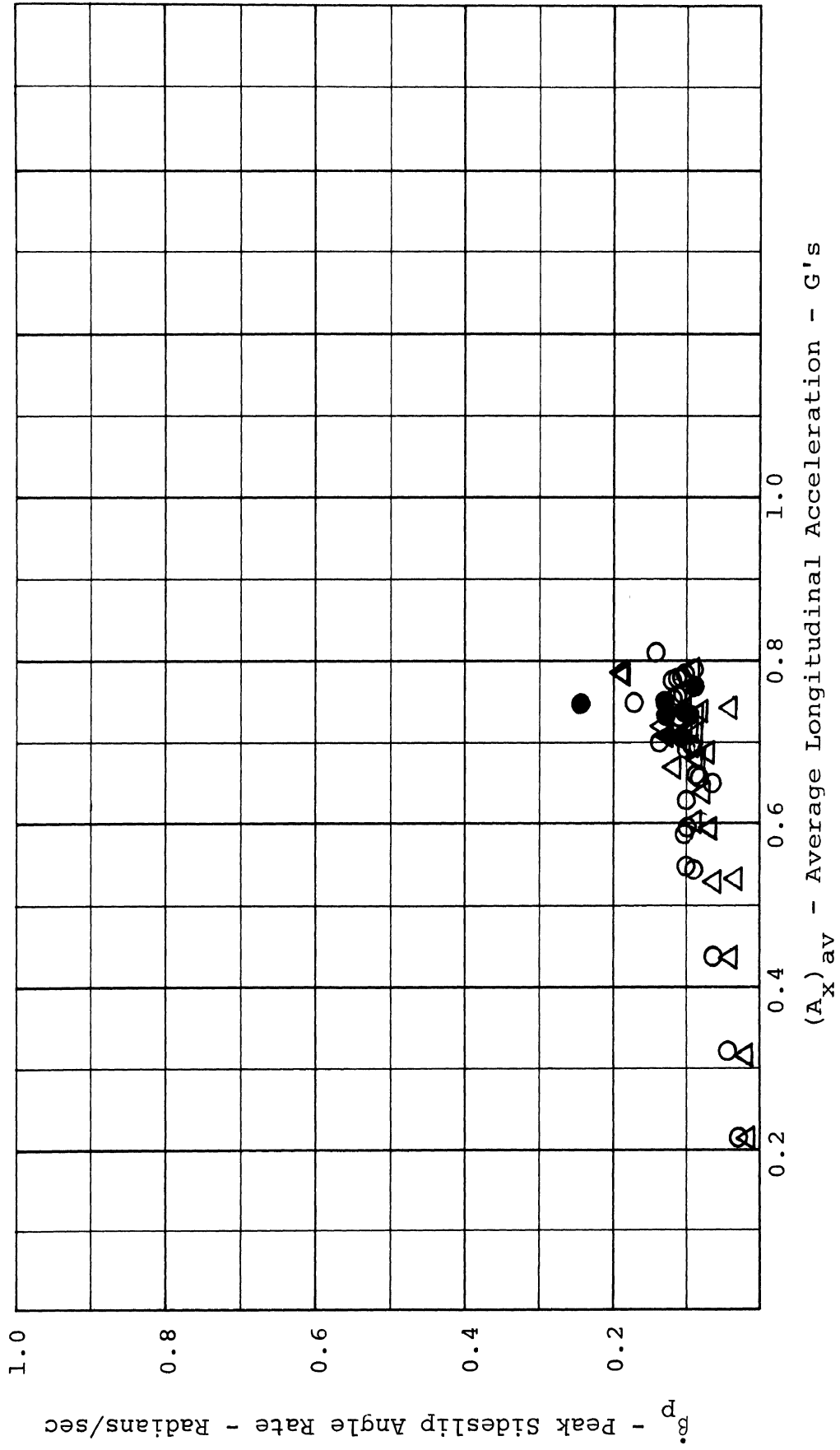
BRAKING IN A TURN - AUSTIN



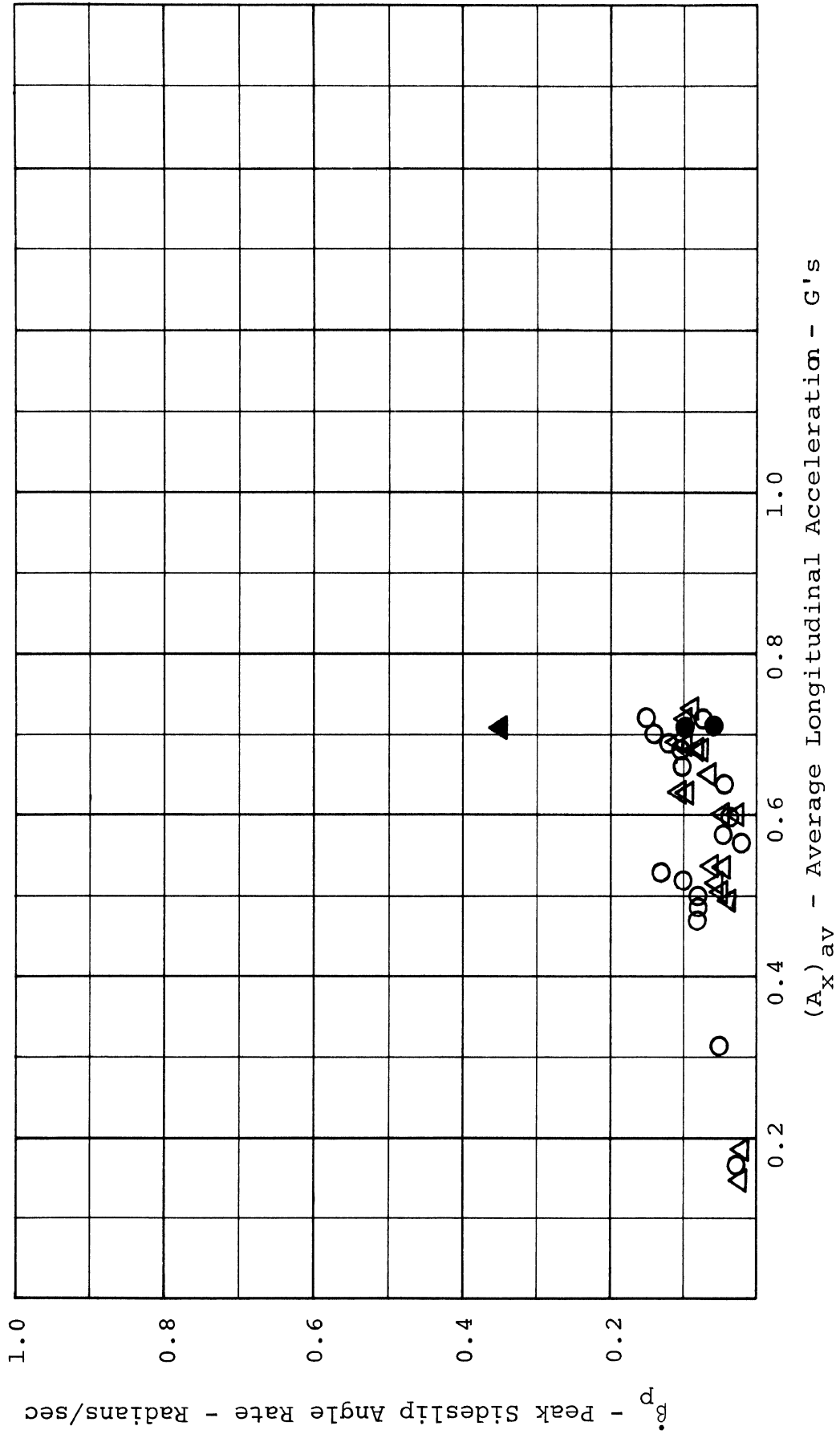
BRAKING IN A TURN - CHEVROLET



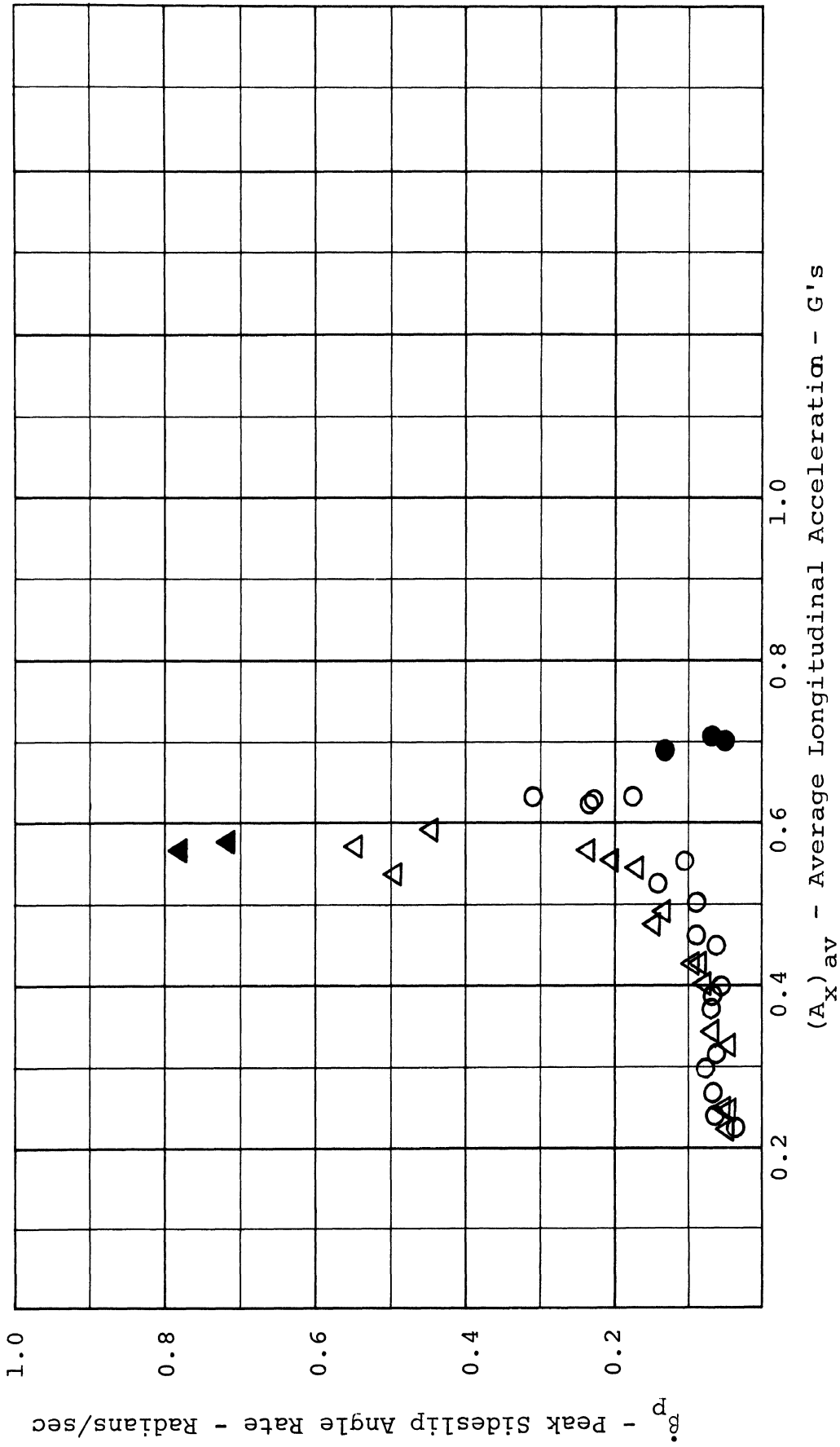
BRAKING IN A TURN - DODGE



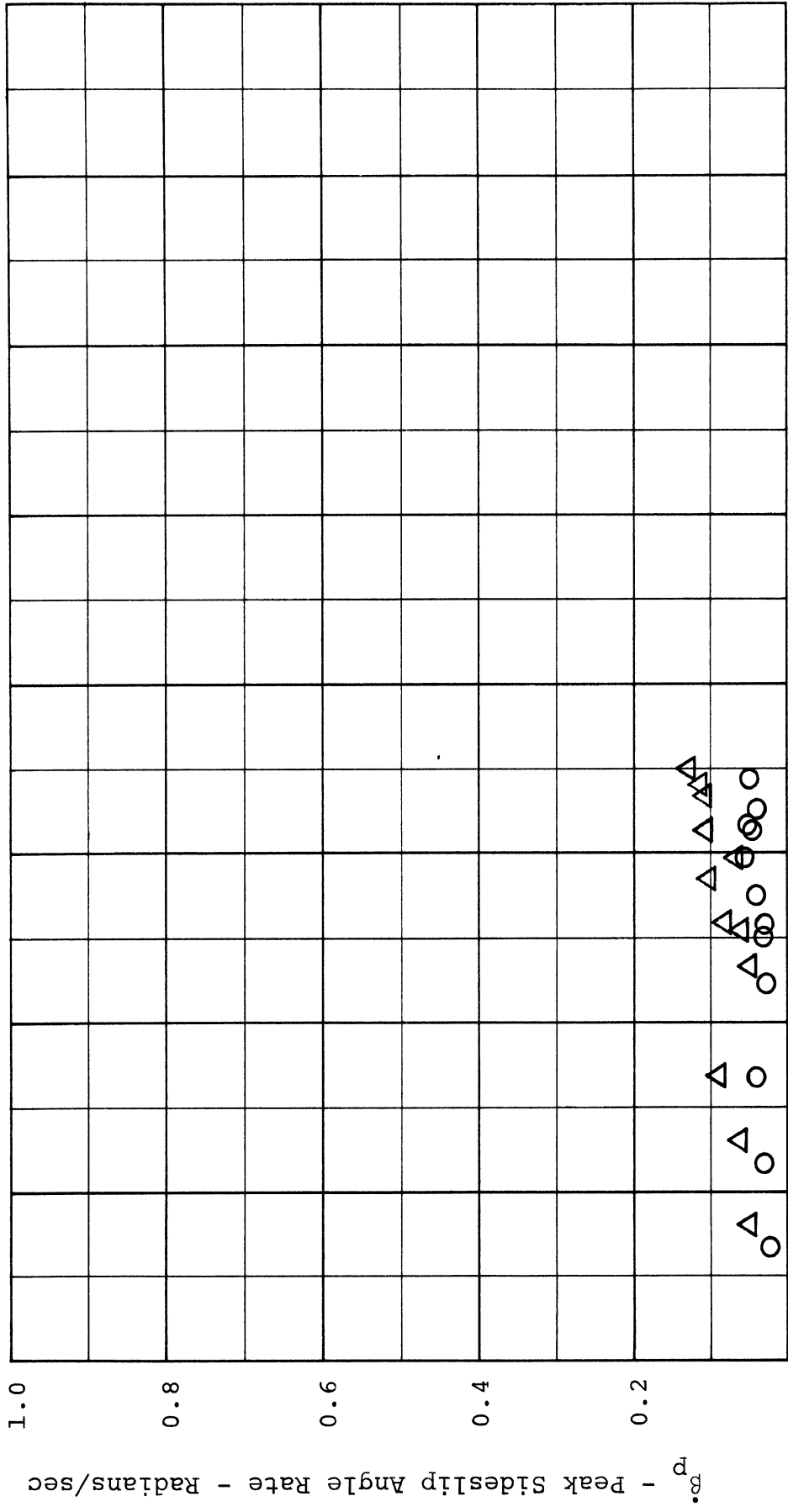
BRAKING IN A TURN - FIREBIRD



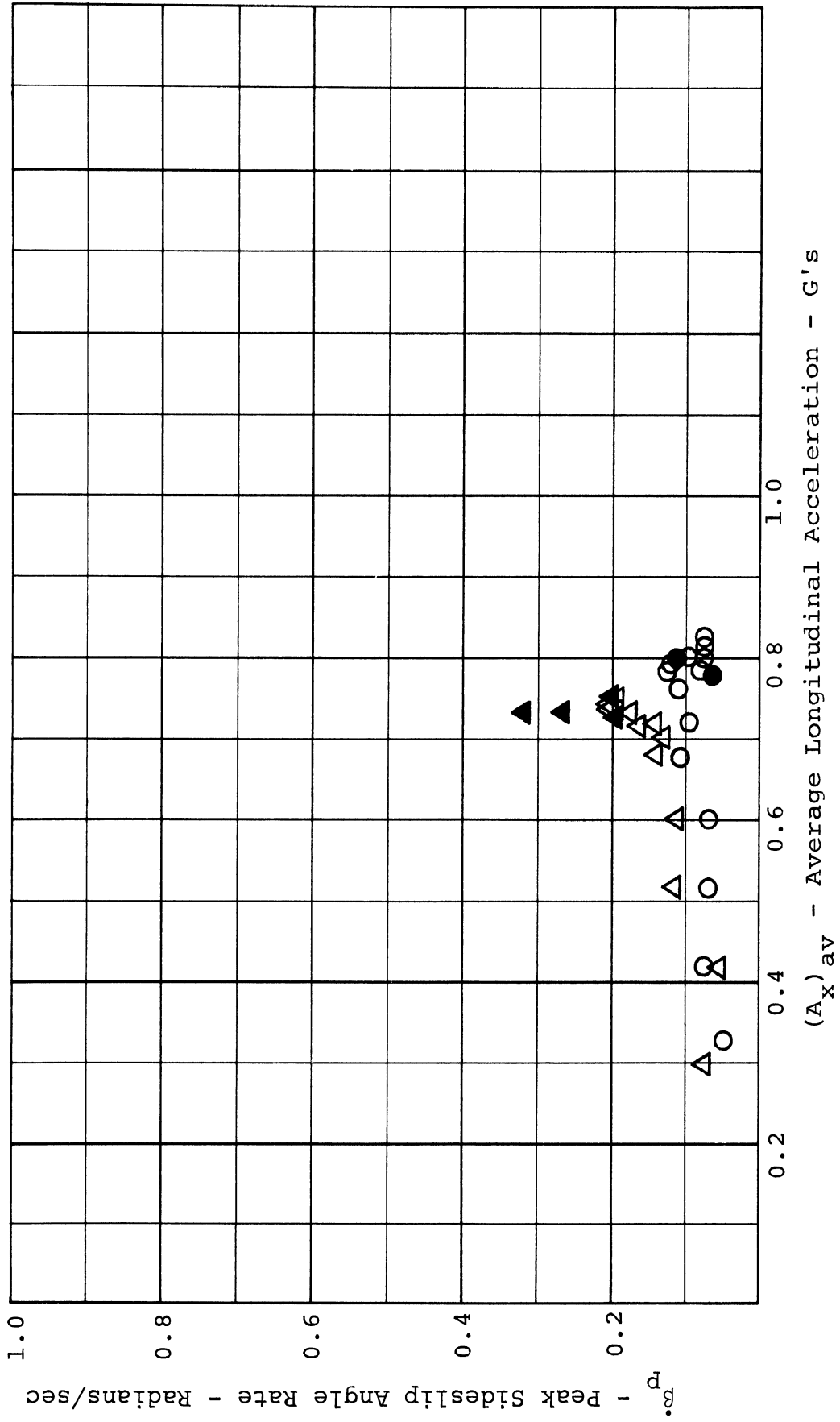
BRAKING IN A TURN - GALAXIE



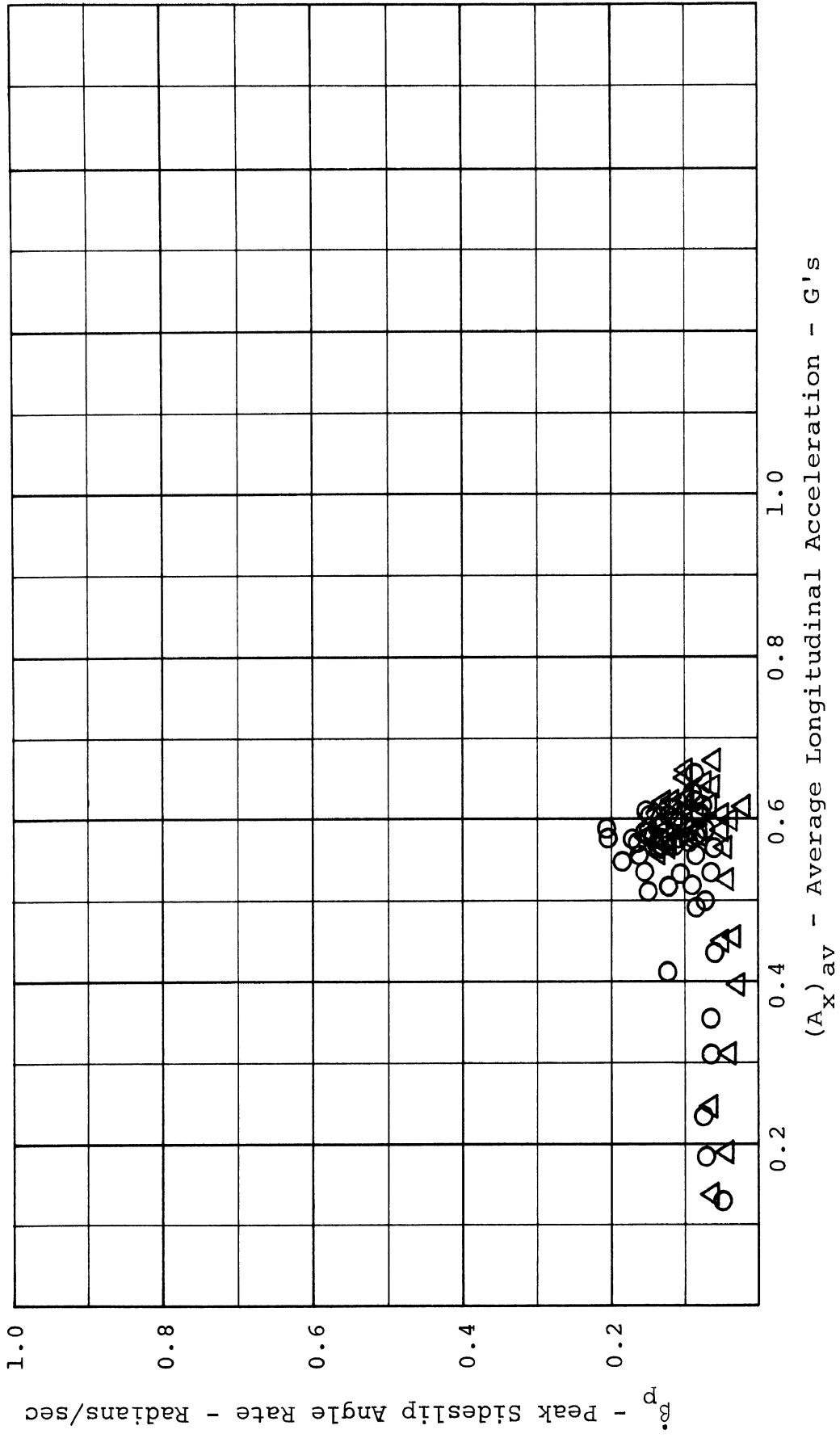
BRAKING IN A TURN - GREMLIN



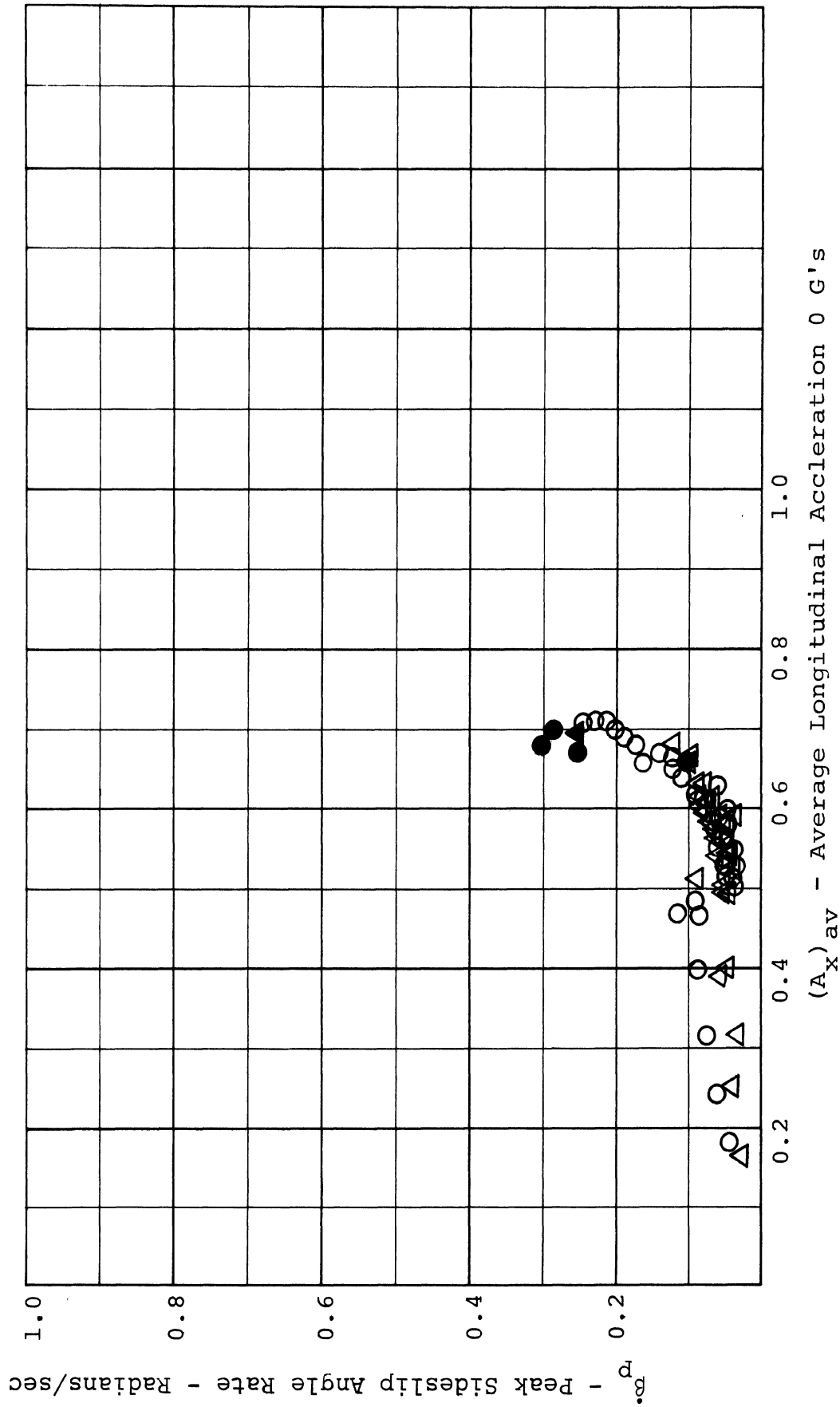
BRAKING IN A TURN - IMPERIAL



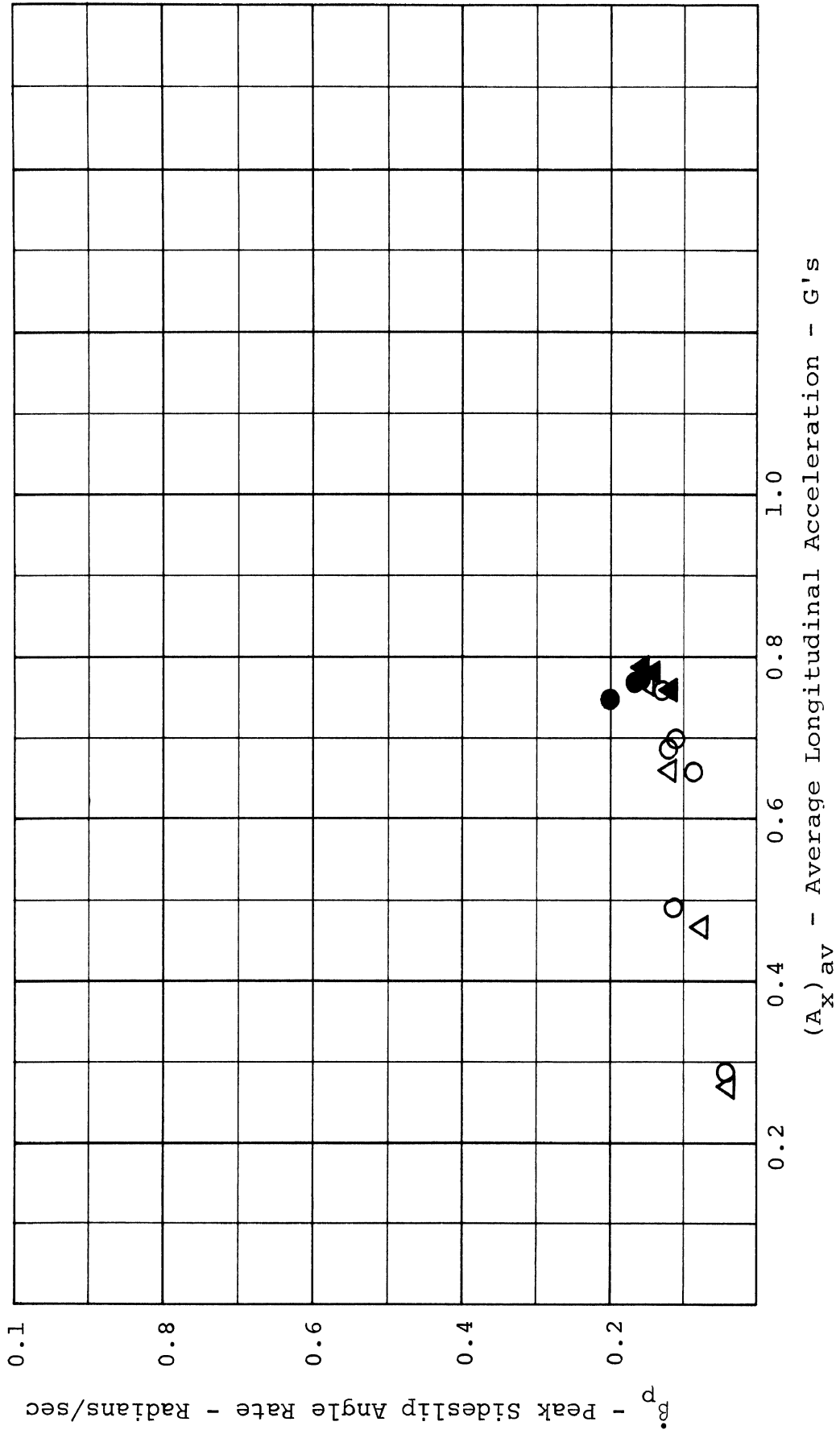
BRAKING IN A TURN - LOTUS



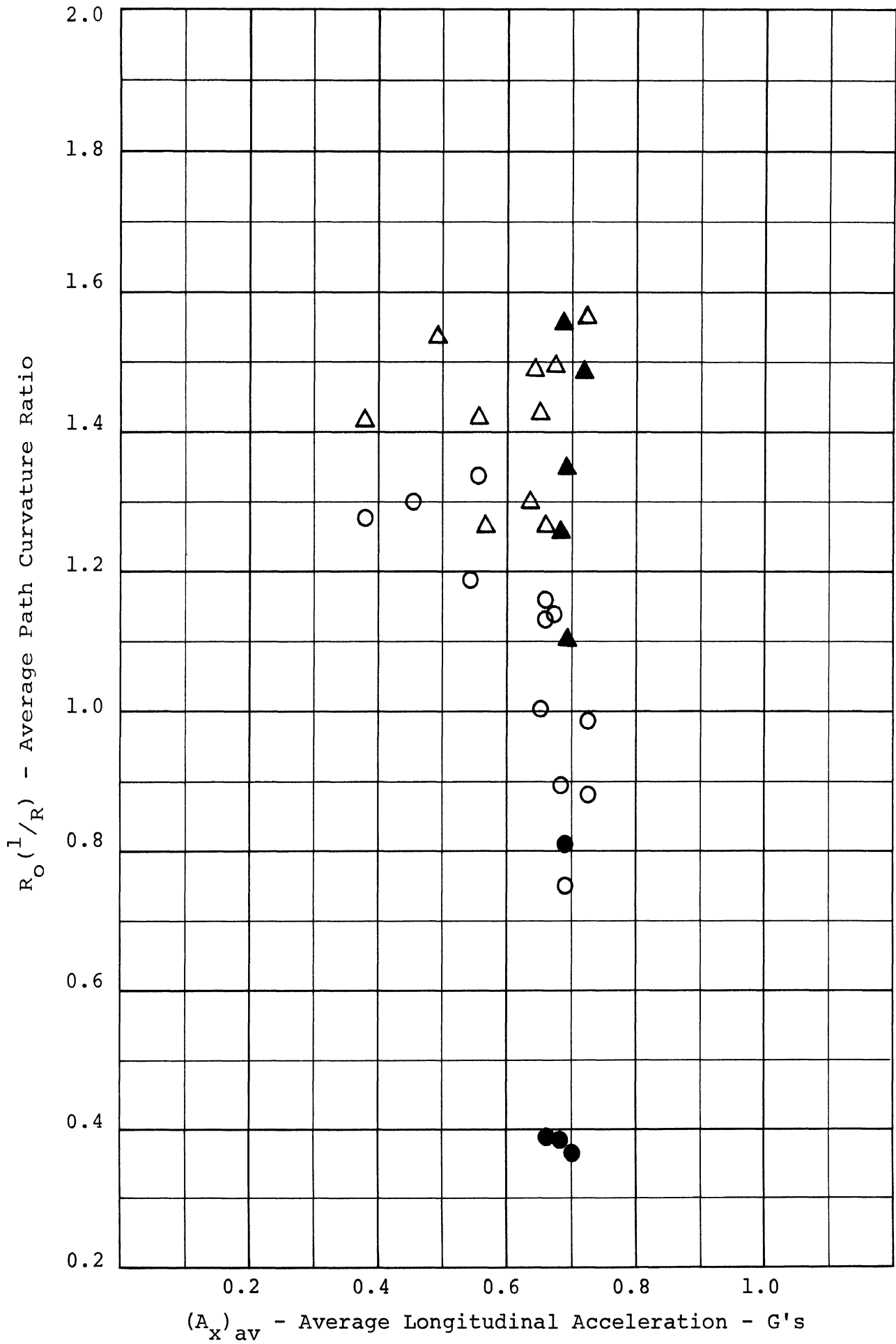
BRAKING IN A TURN - MERCEDES



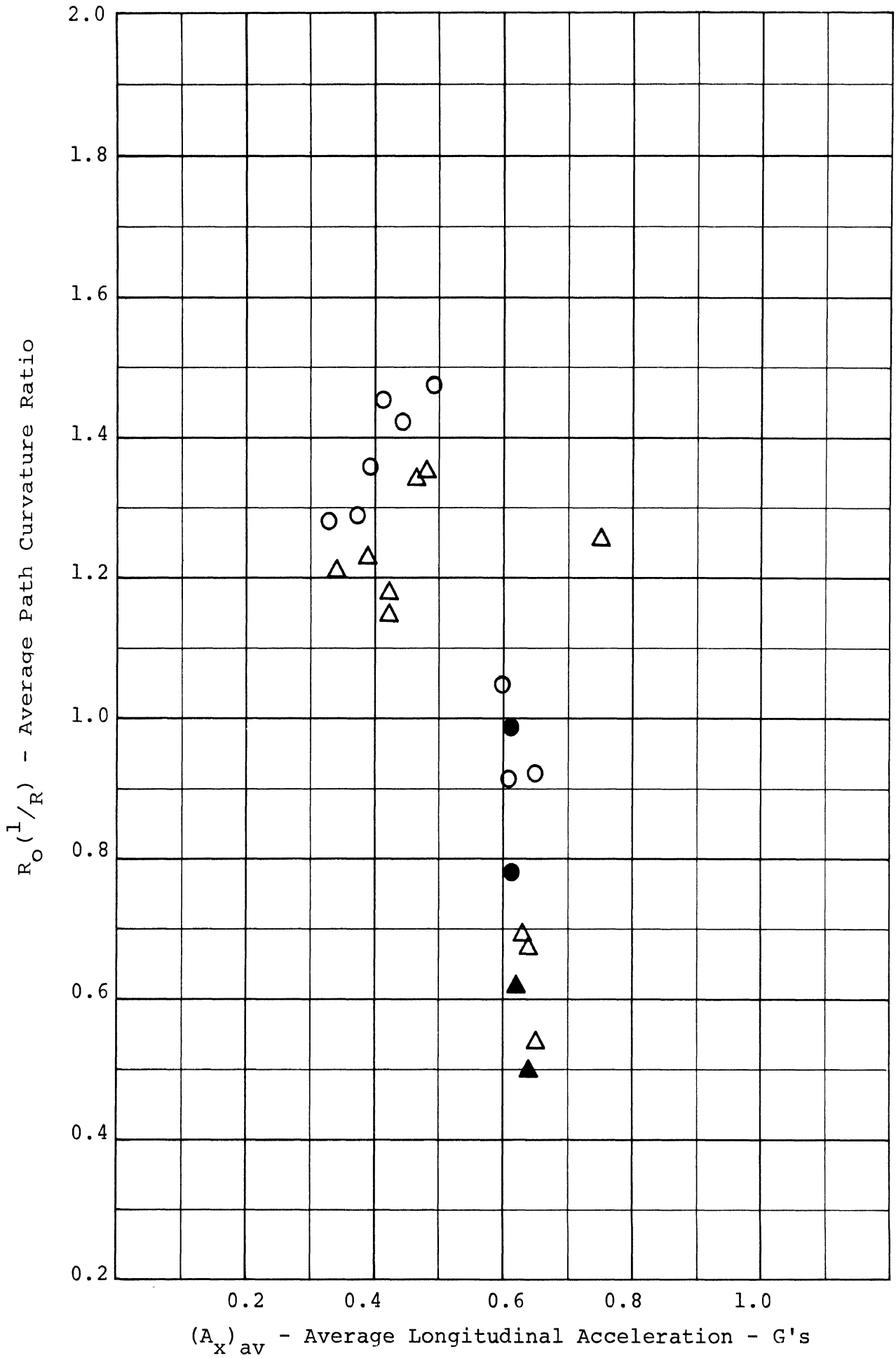
BRAKING IN A TURN - TORONADO



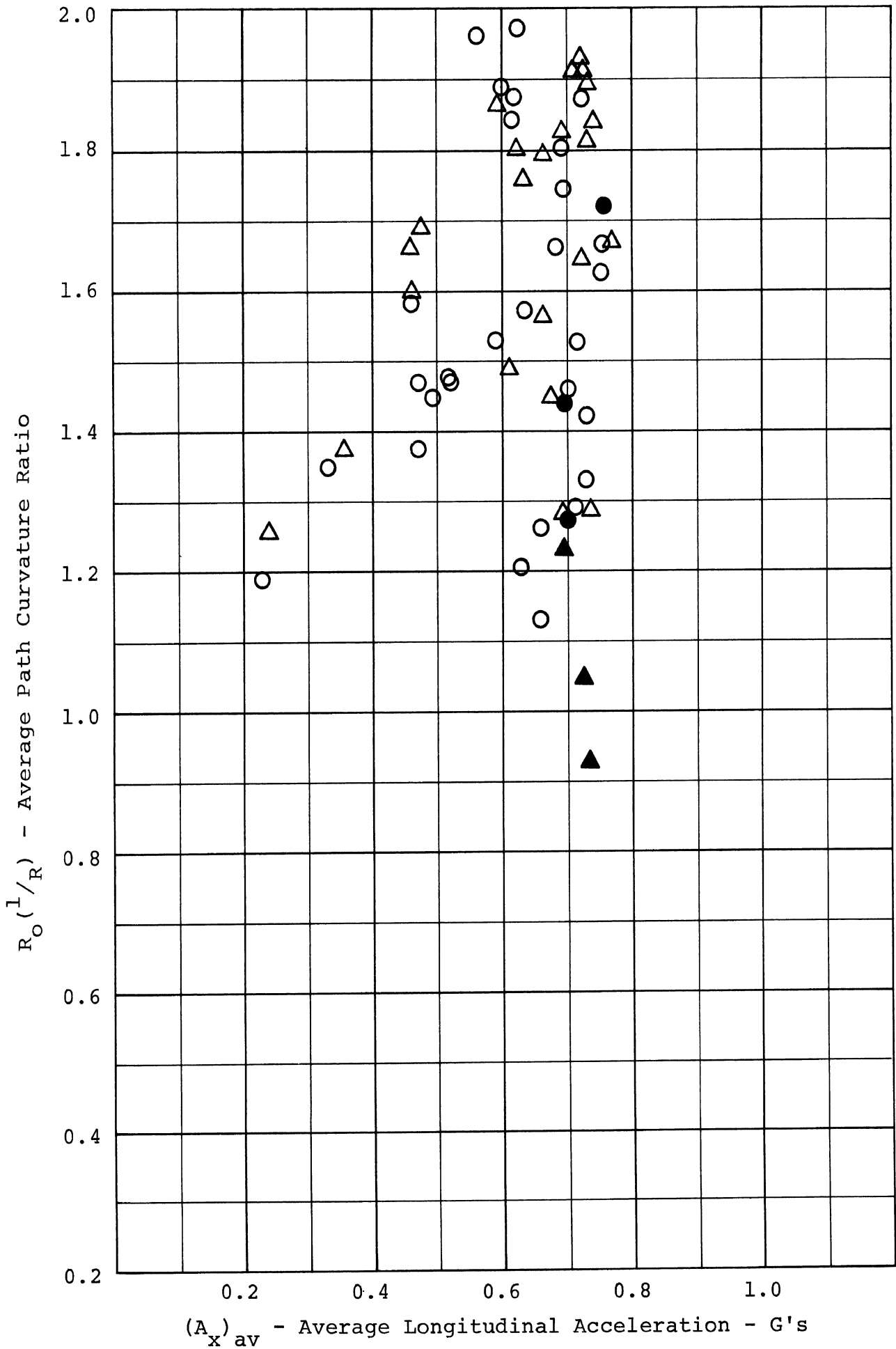
BRAKING IN A TURN - VW



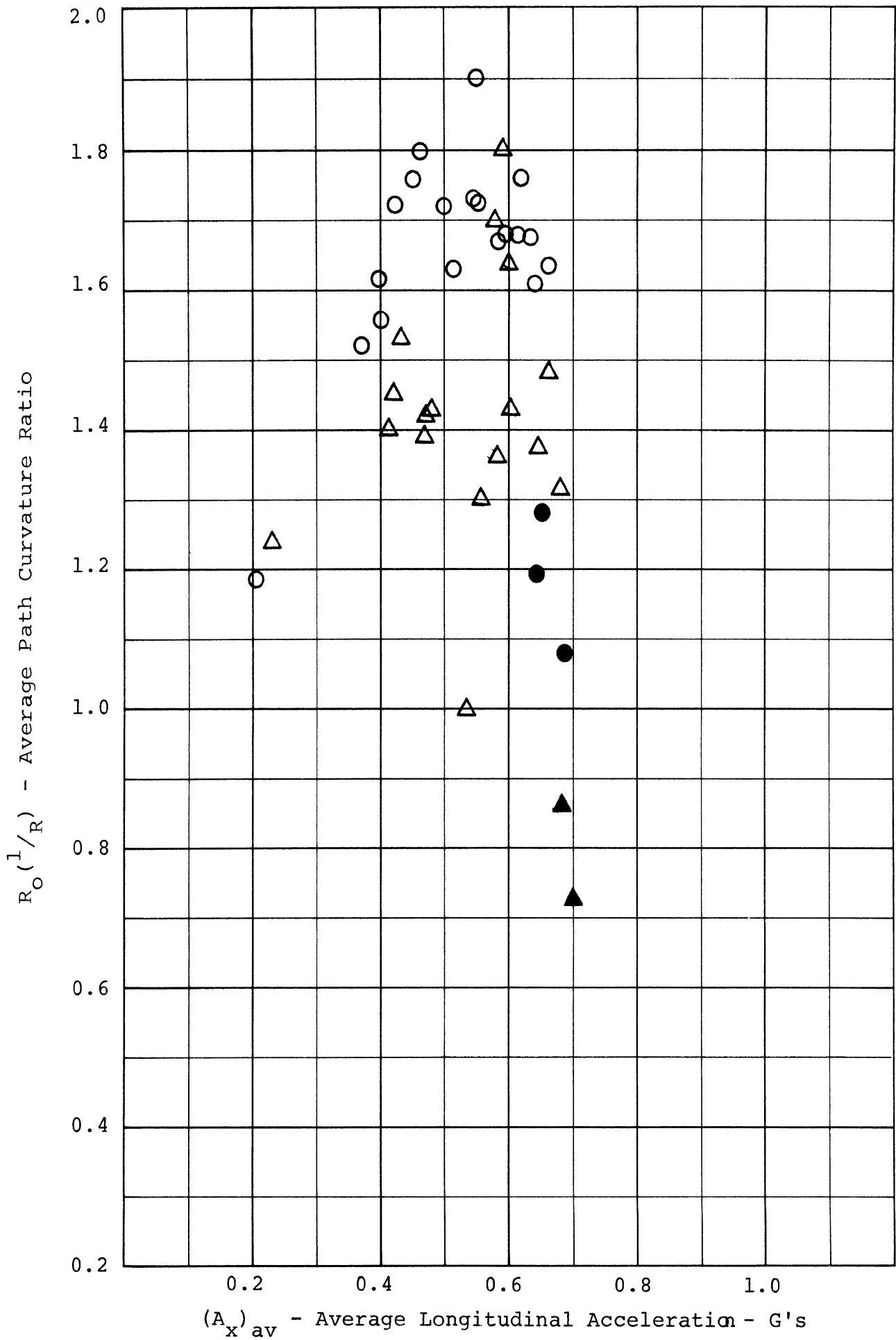
BRAKING IN A TURN - AMBASSADOR



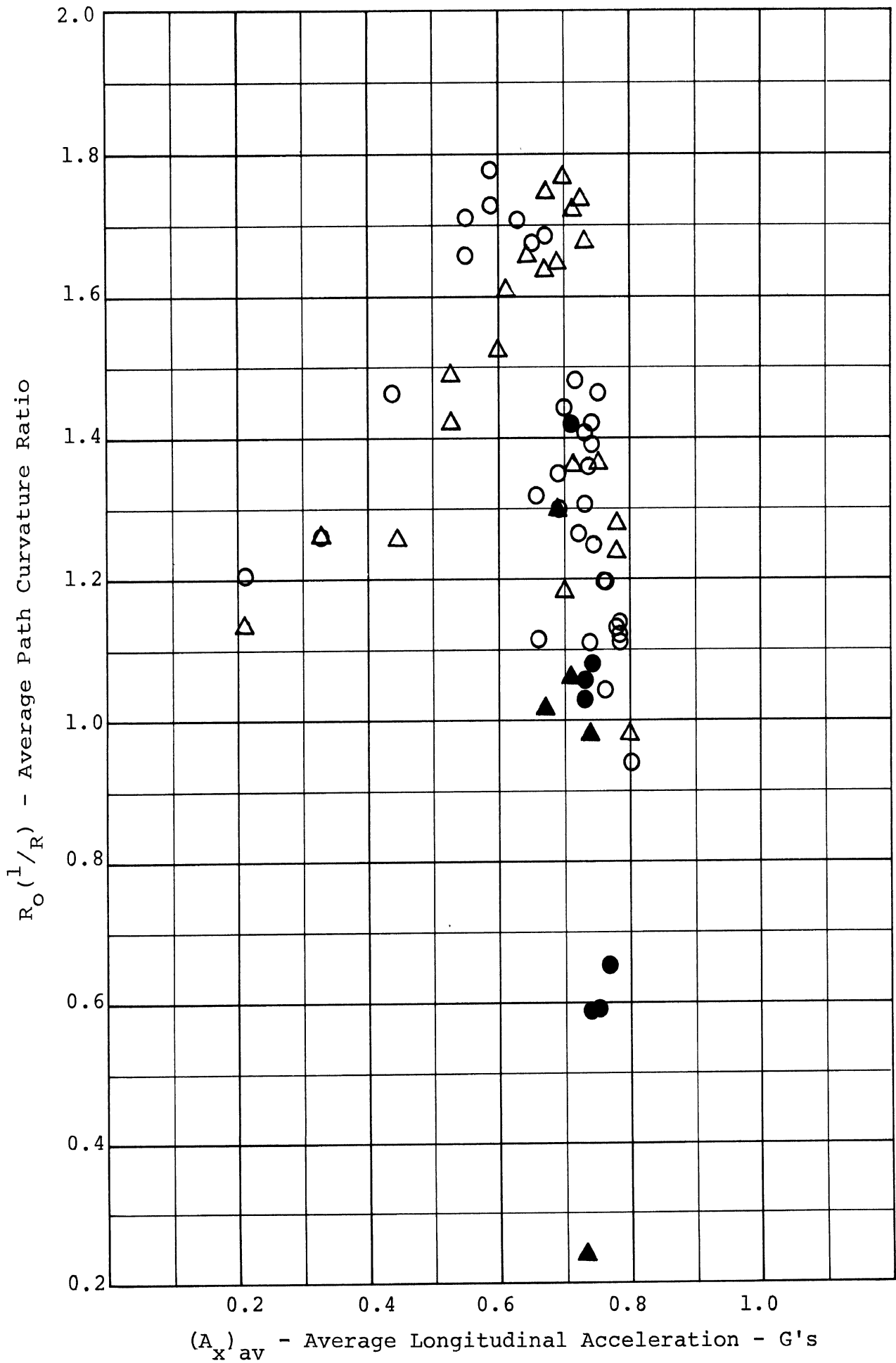
BRAKING IN A TURN - AUSTIN



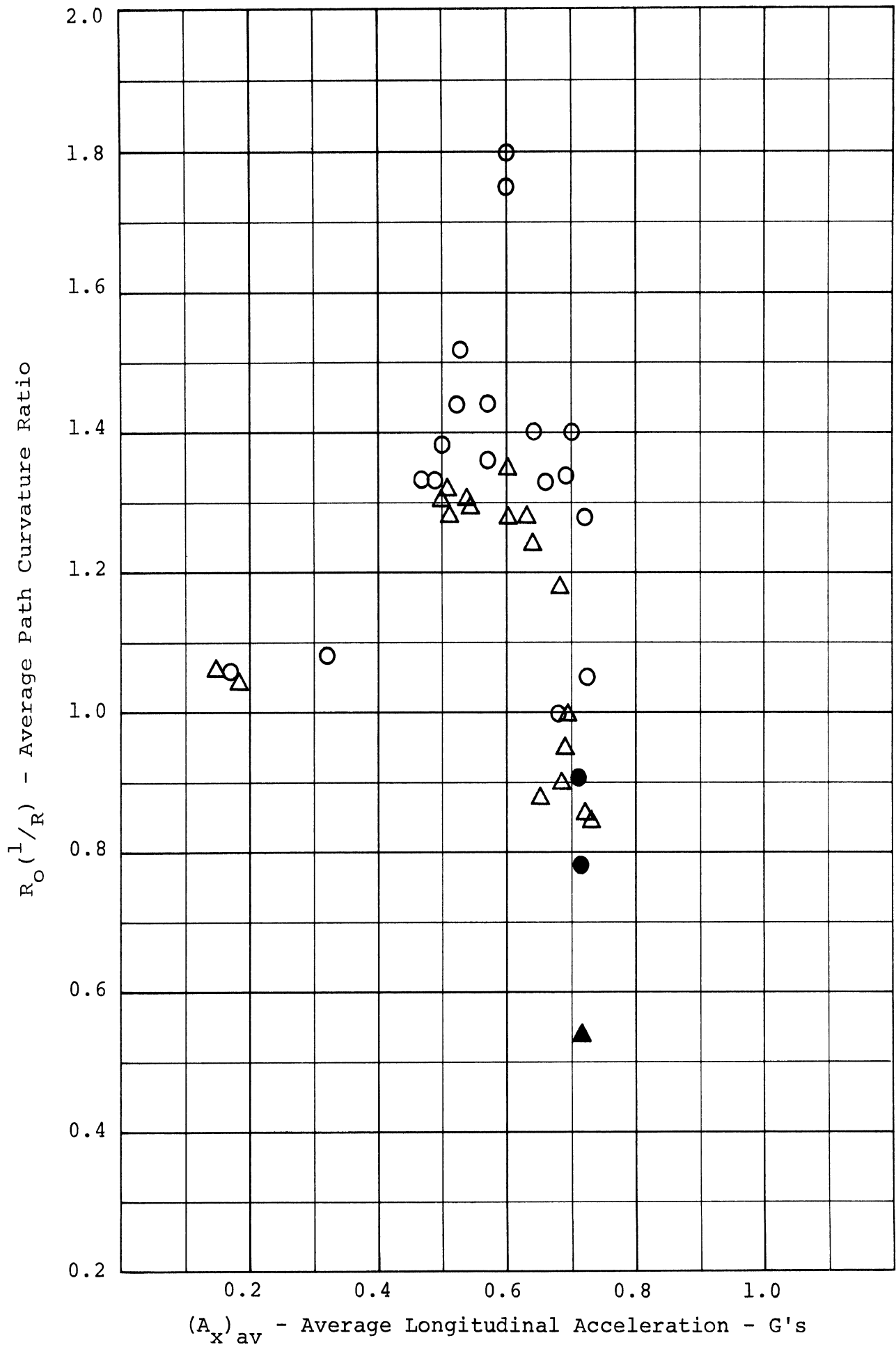
BRAKING IN A TURN - CHEVROLET



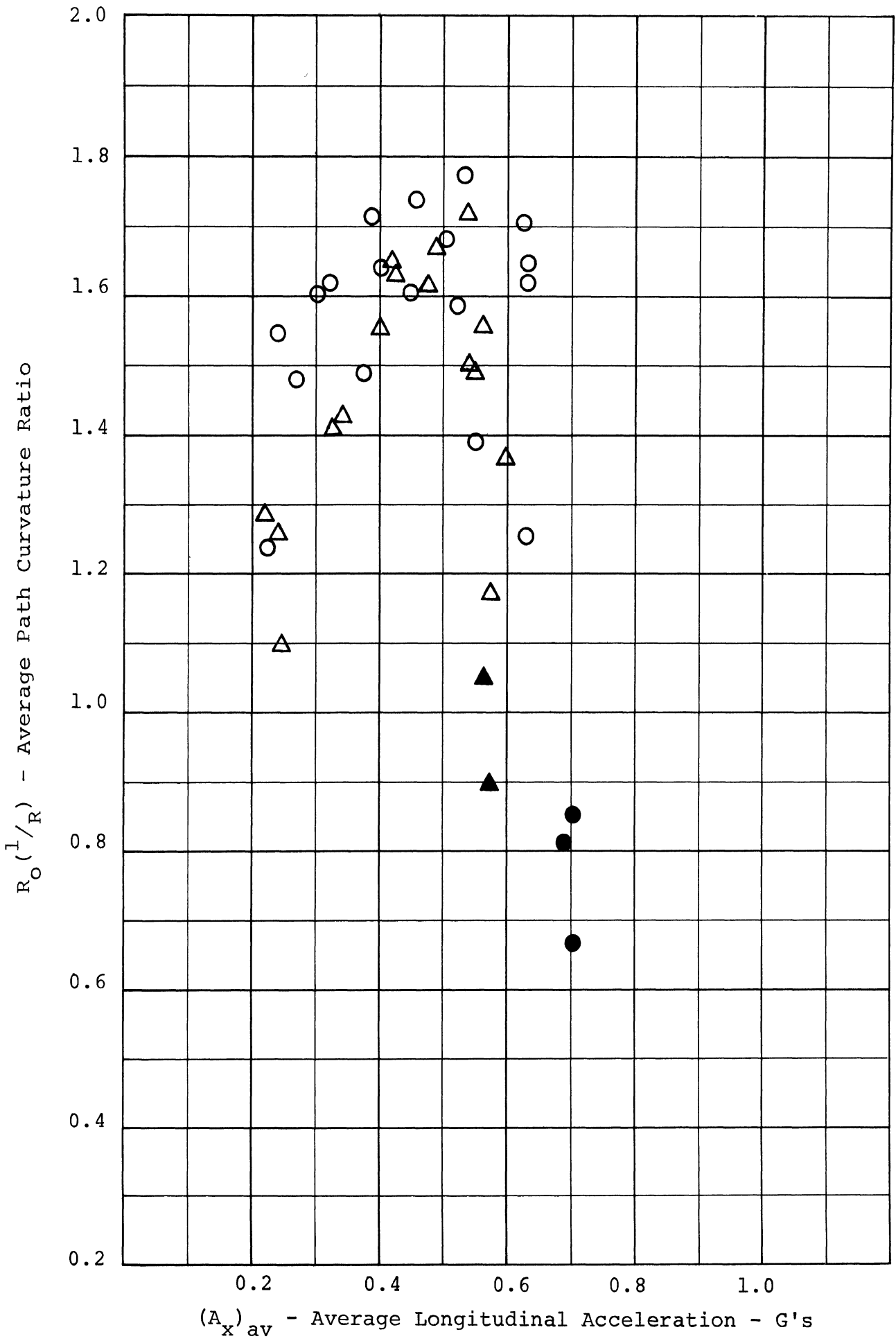
BRAKING IN A TURN - DODGE



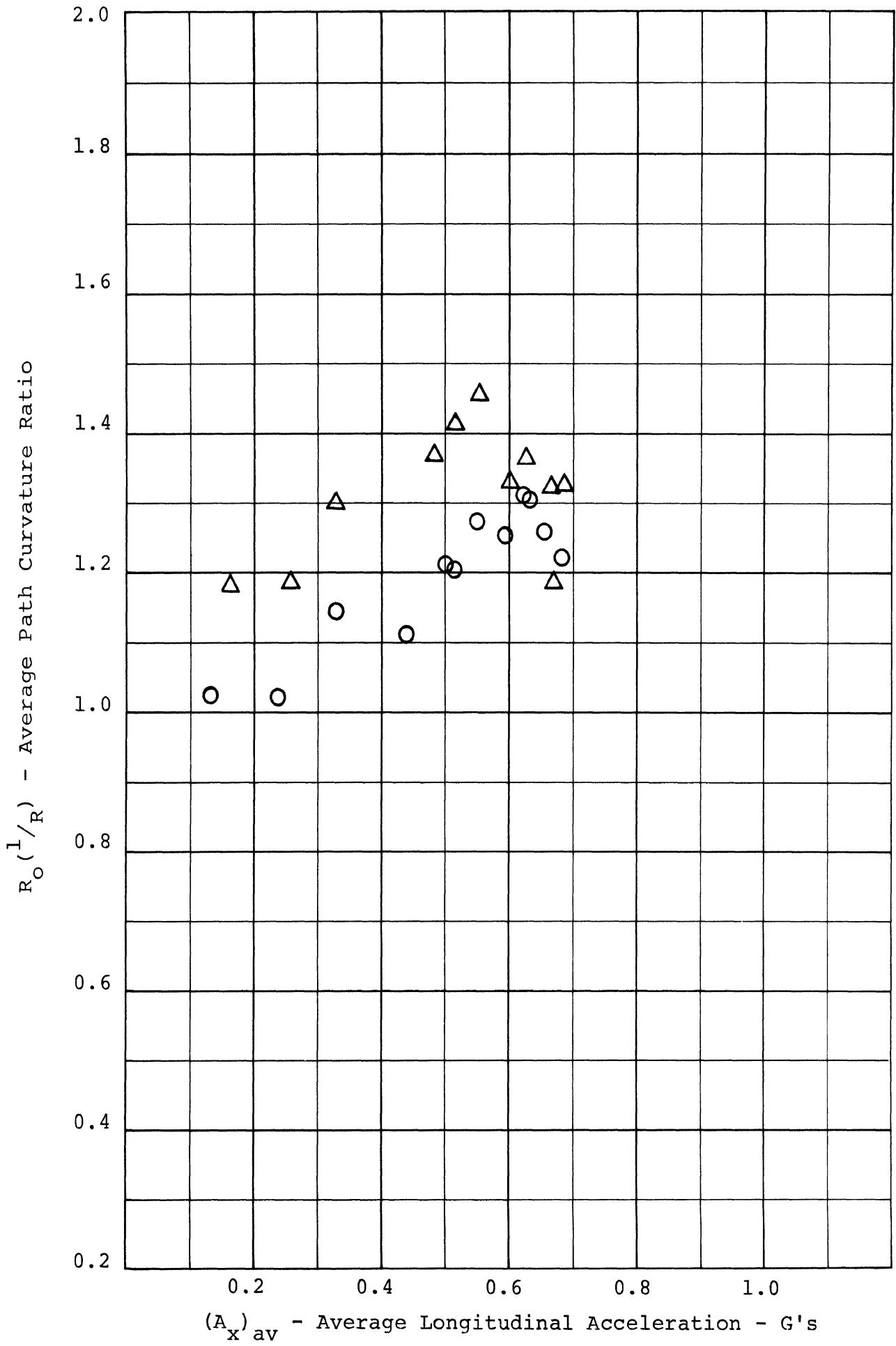
BRAKING IN A TURN - FIREBIRD



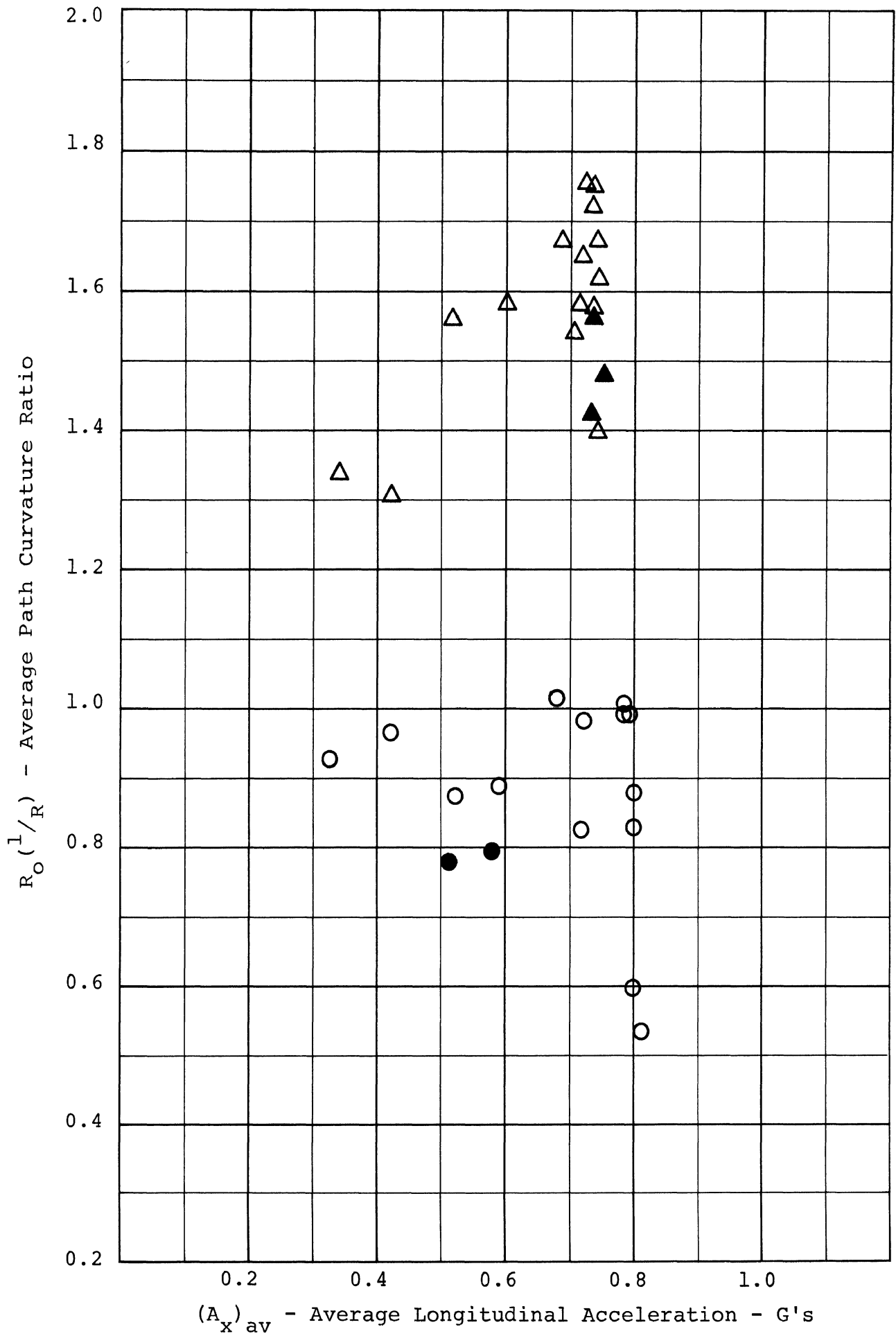
BRAKING IN A TURN - GALAXIE



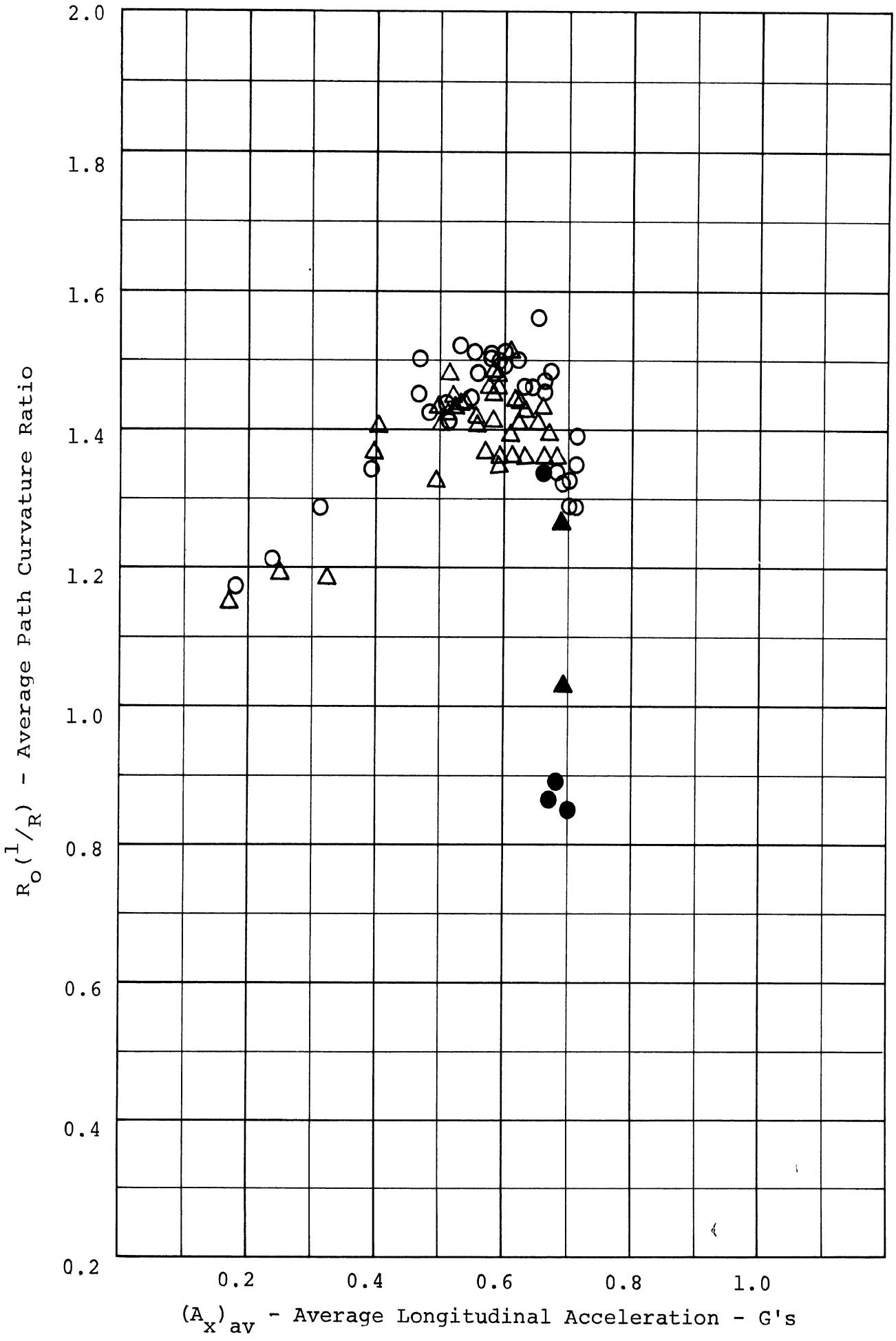
BRAKING IN A TURN - GREMLIN



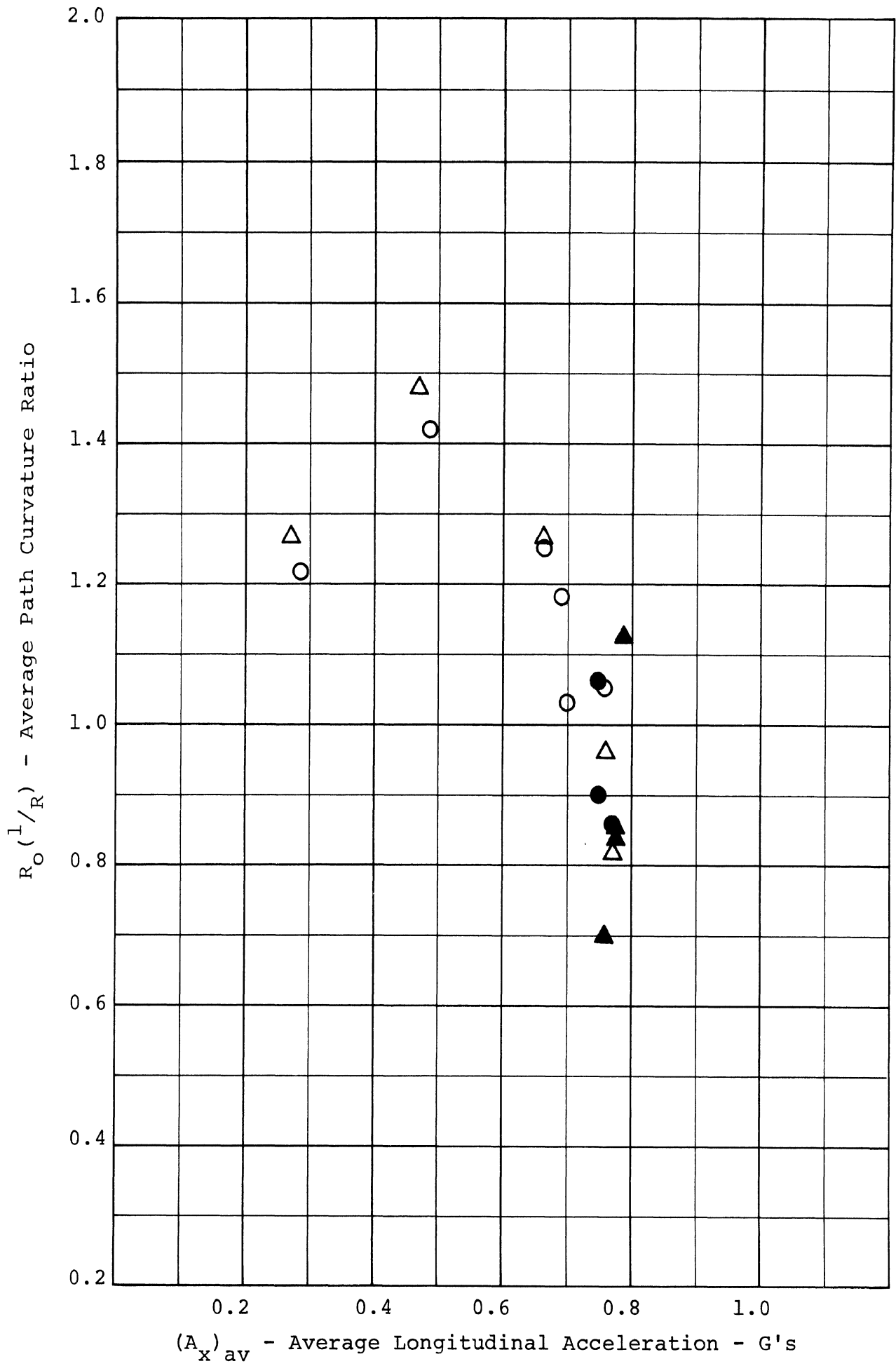
BRAKING IN A TURN - IMPERIAL



BRAKING IN A TURN - LOTUS



BRAKING IN A TURN - TORONADO



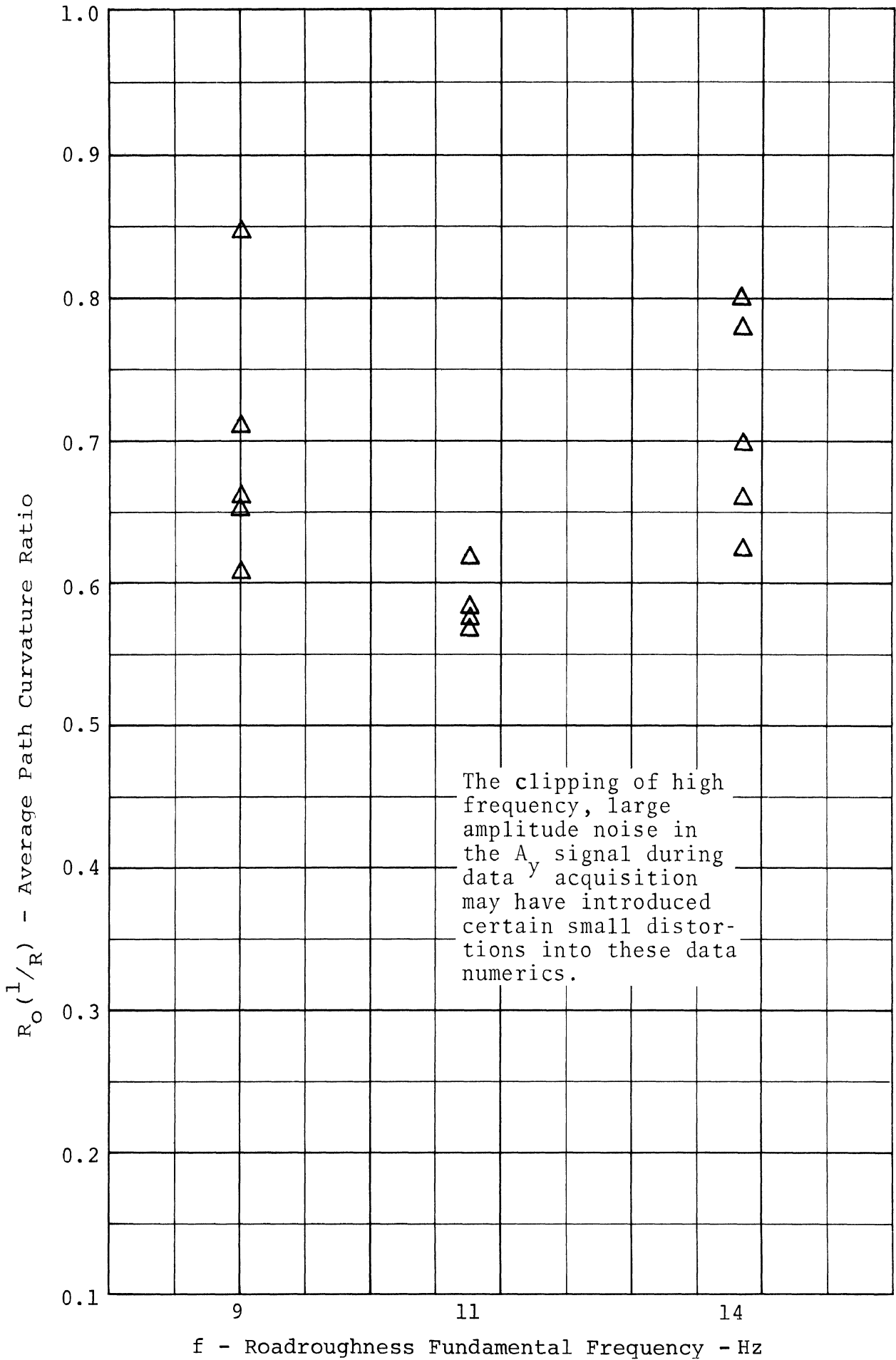
BRAKING IN A TURN - VW

VHTP #3 - ROADHOLDING IN A TURN

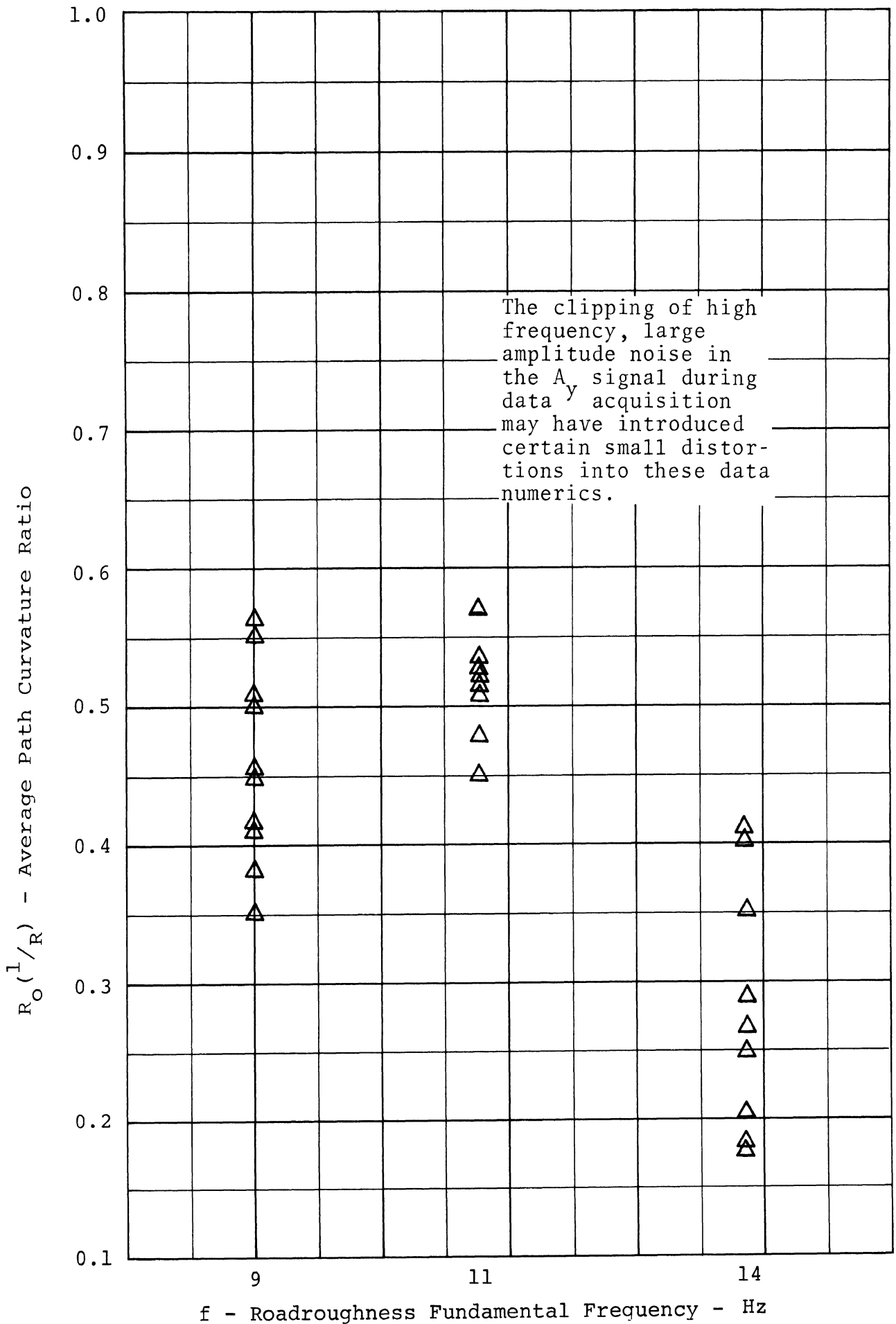
f - Roadroughness Fundamental Frequency—Determined
by the Spacing of the Disturbance Elements in Each
Grid

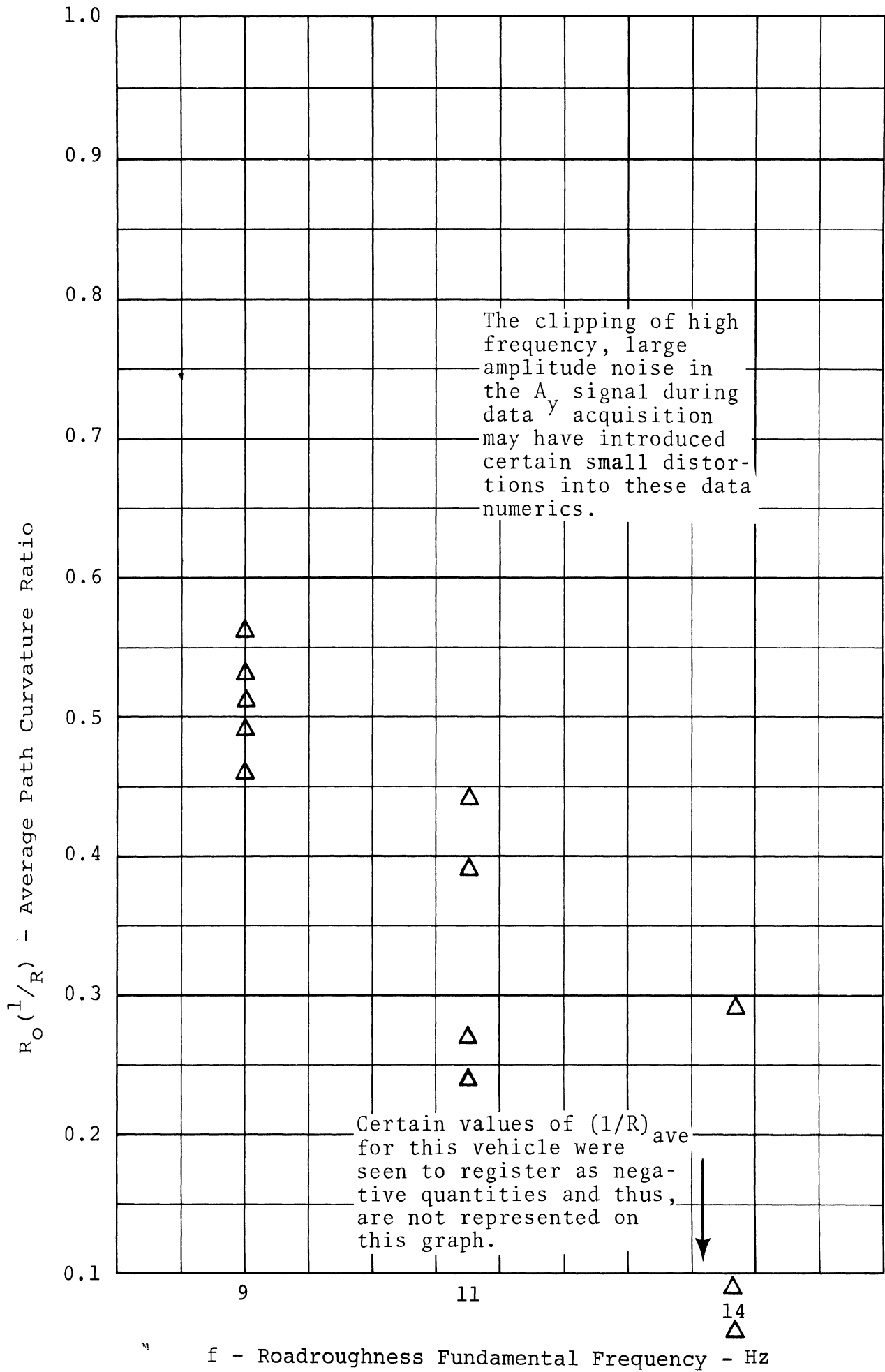
$R_o (1/R)_{ave}$ - Average Path Curvature Ratio Relative
to the Initial Turn

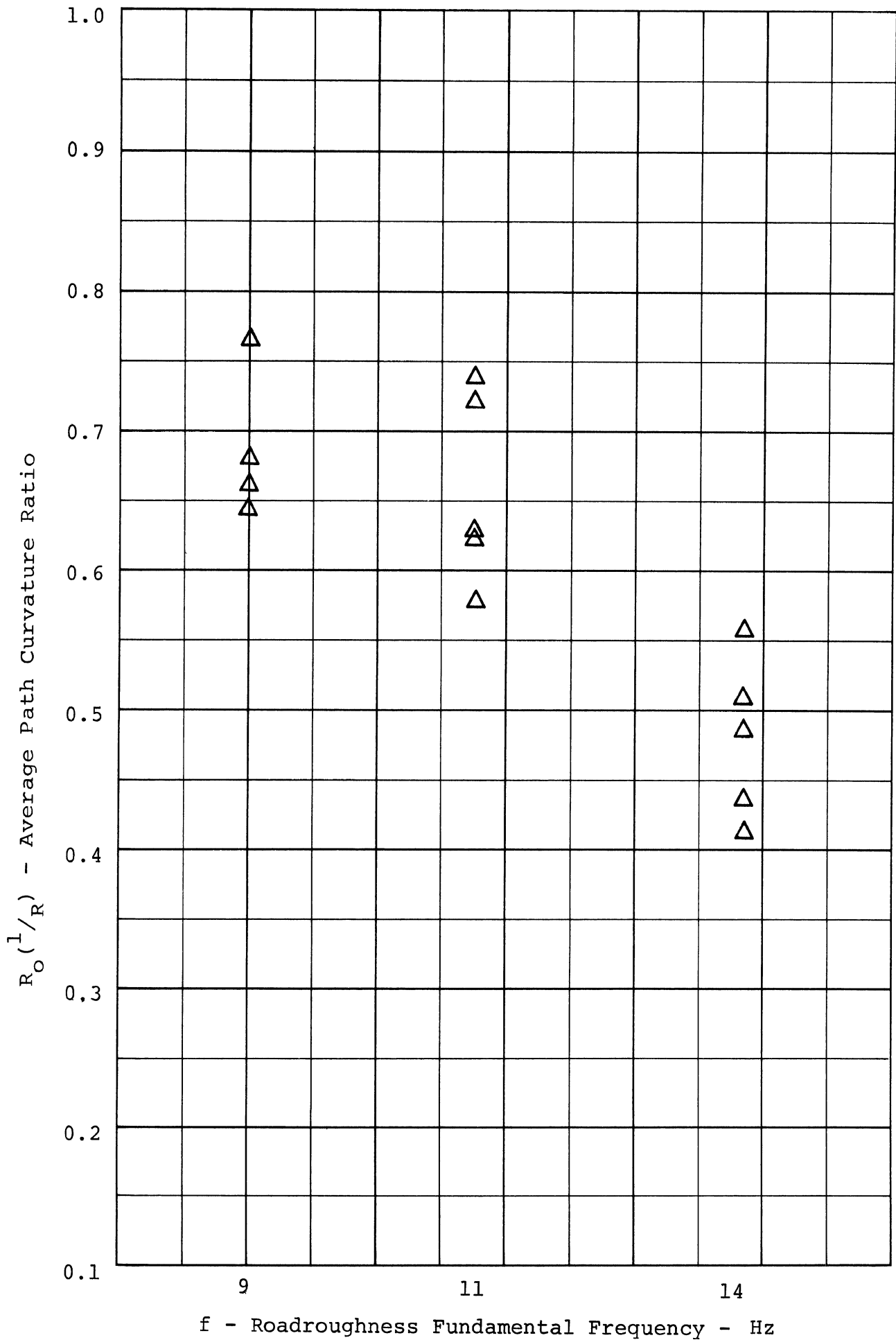
$\dot{\beta}_p$ - Peak Body Sideslip Rate



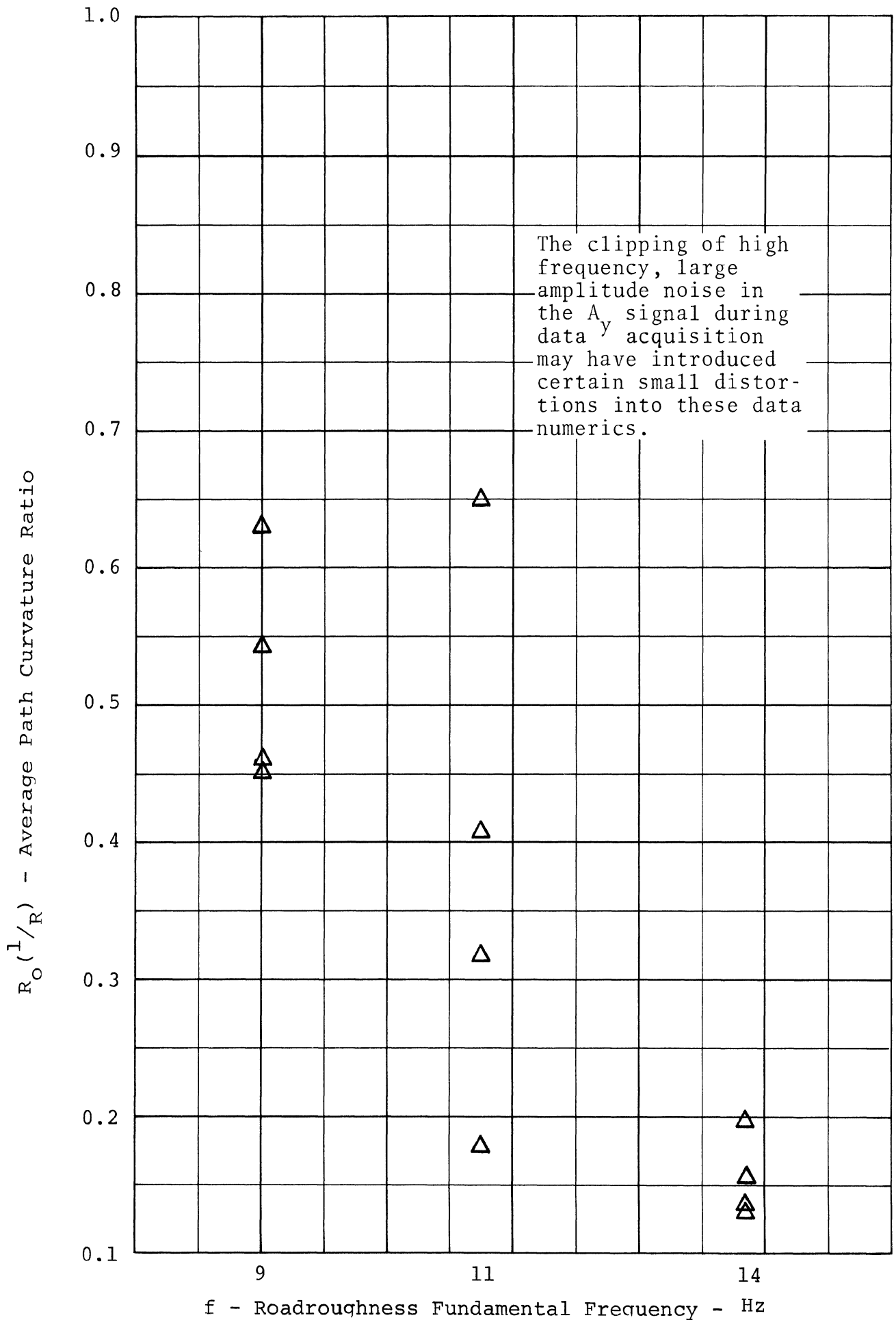
ROADHOLDING IN A TURN - AMBASSADOR



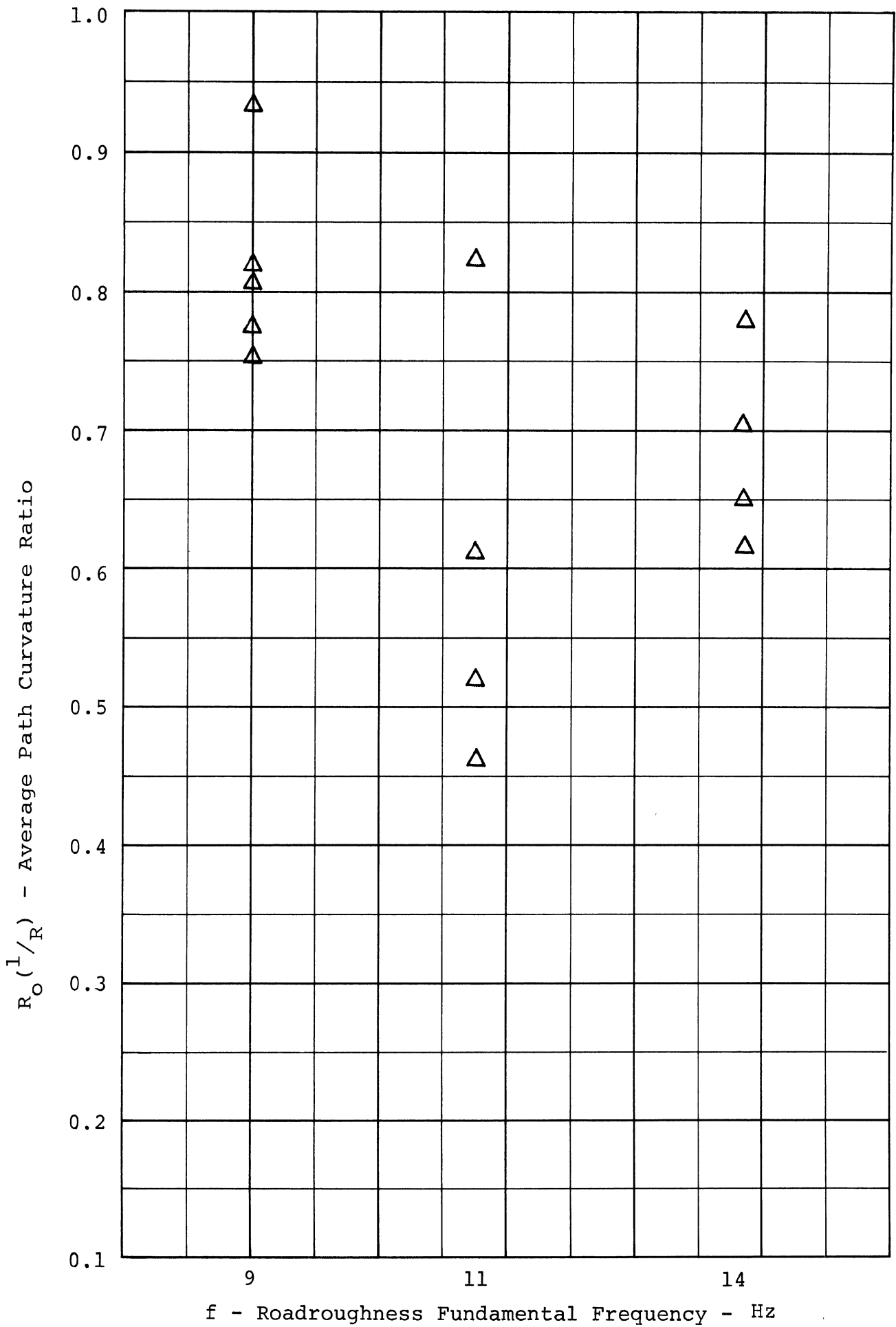




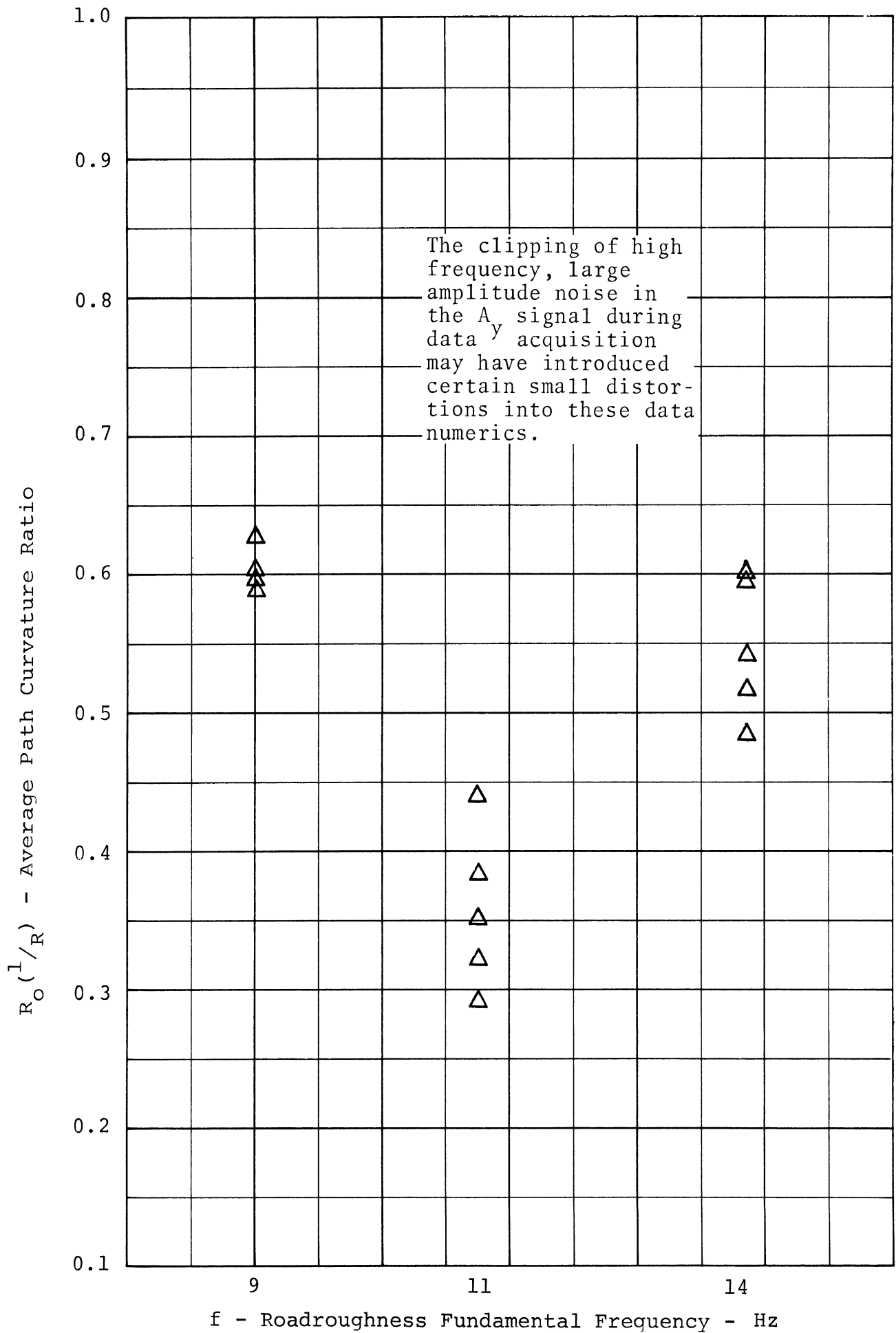
ROADHOLDING IN A TURN - DODGE



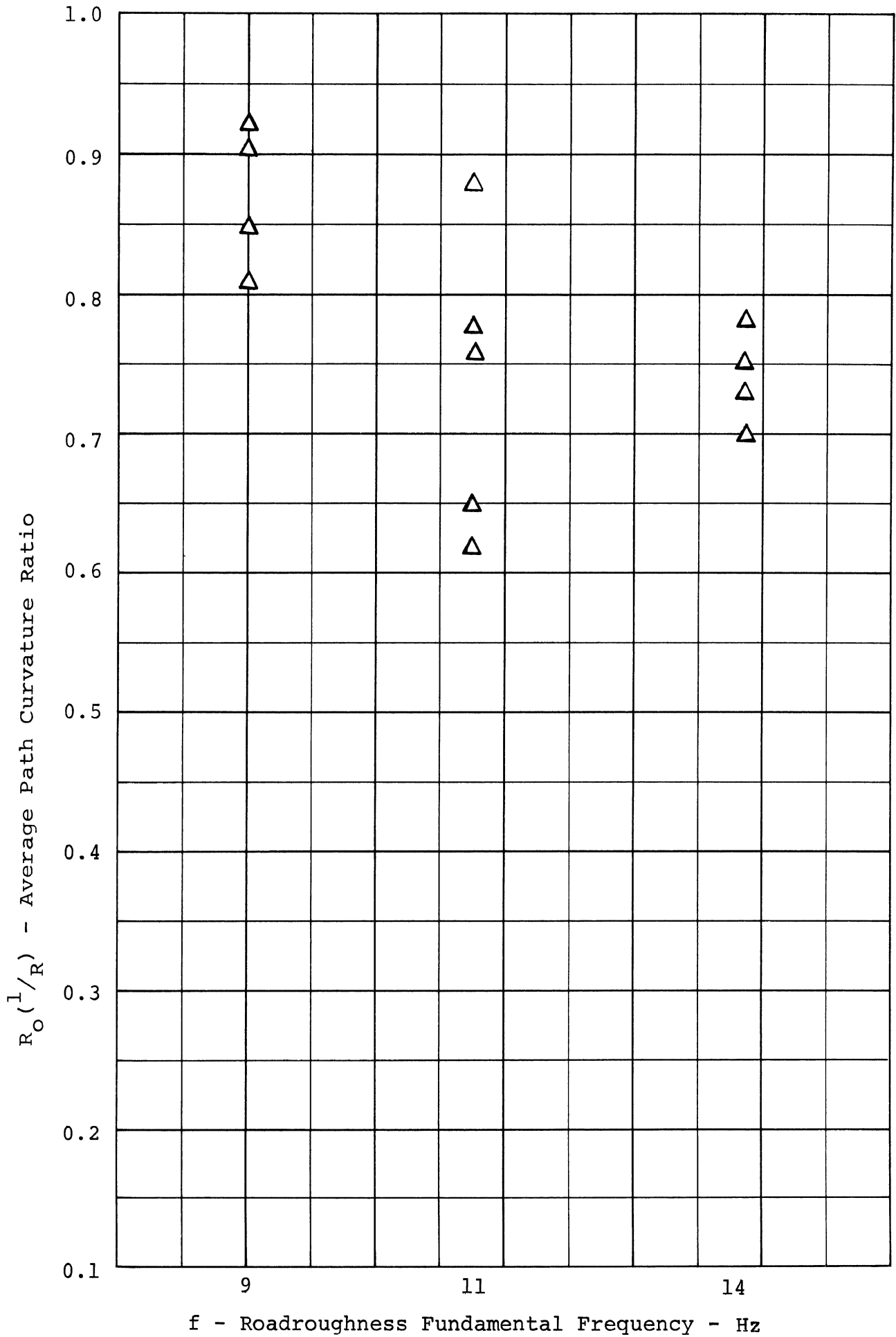
ROADHOLDING IN A TURN - FIREBIRD



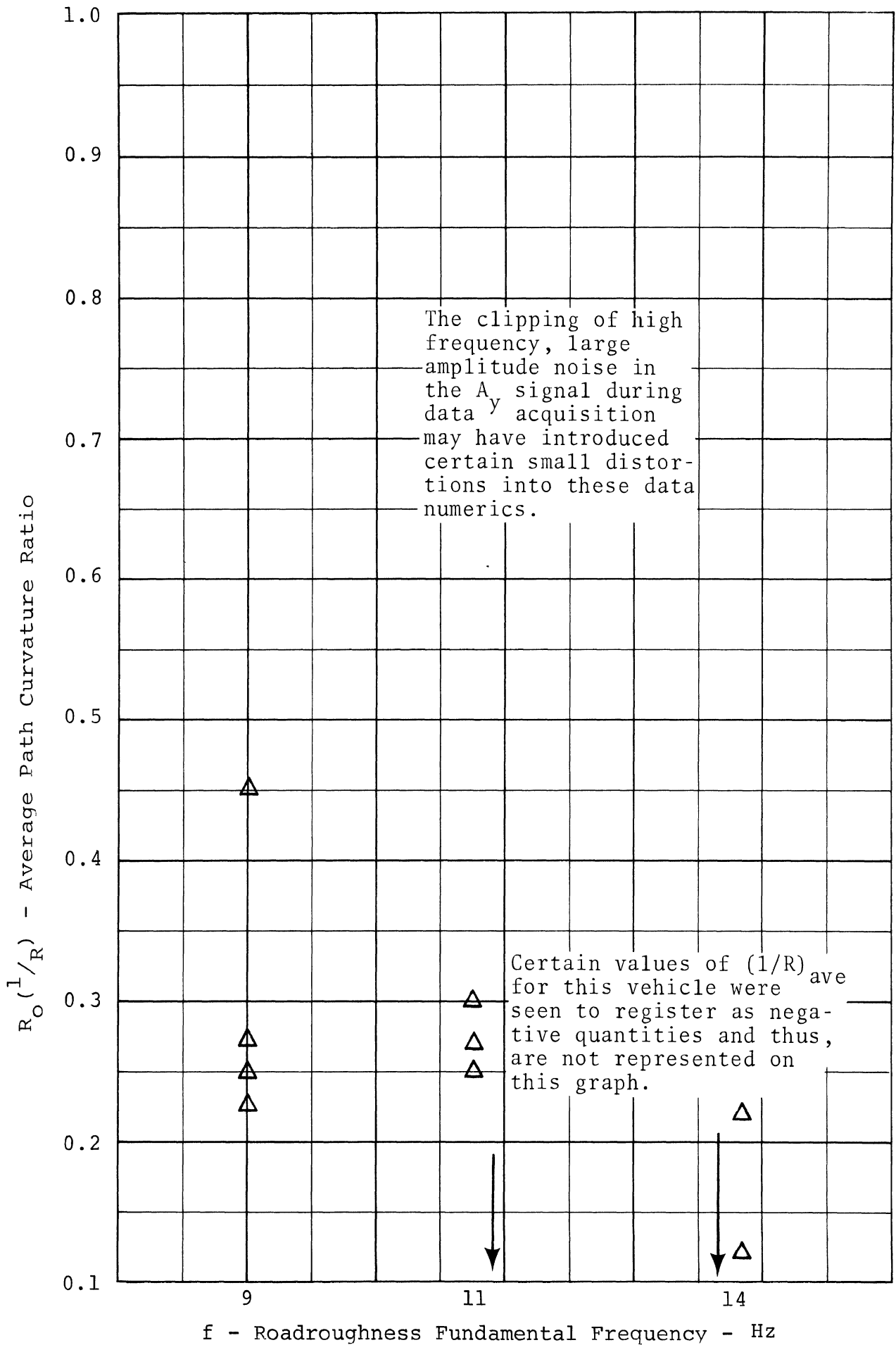
ROADHOLDING IN A TURN - GALAXIE

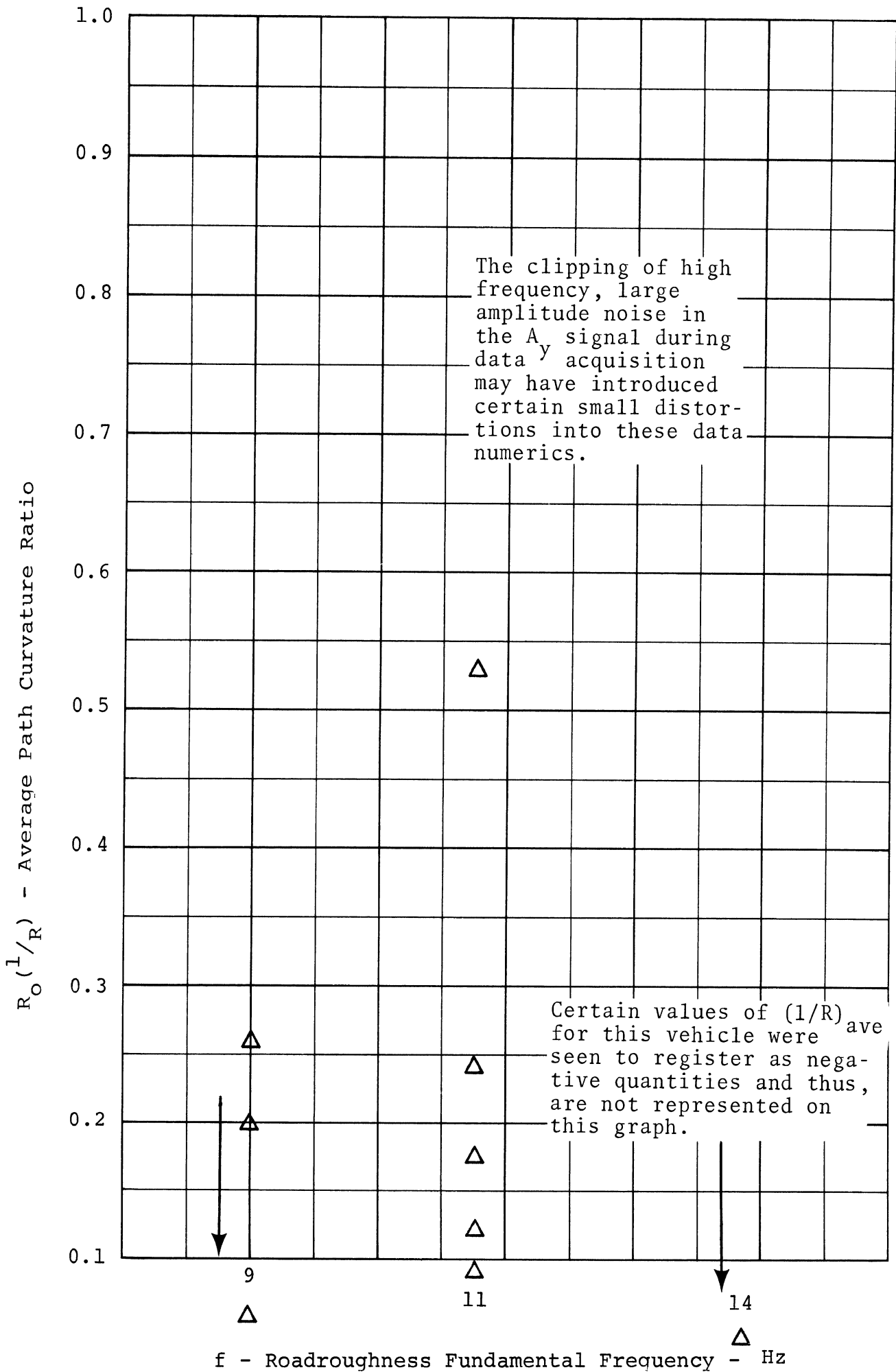


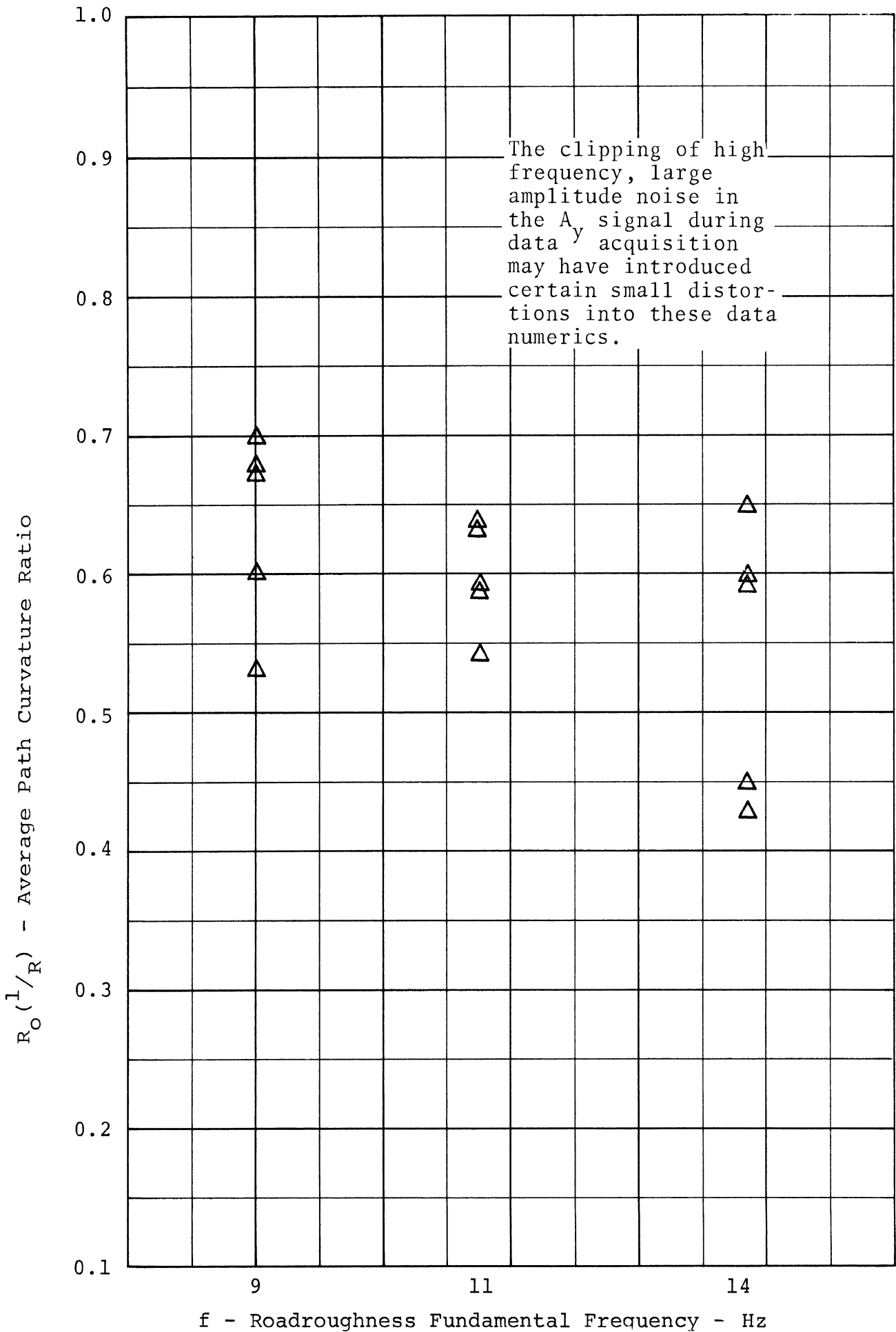
ROADHOLDING IN A TURN - GREMLIN



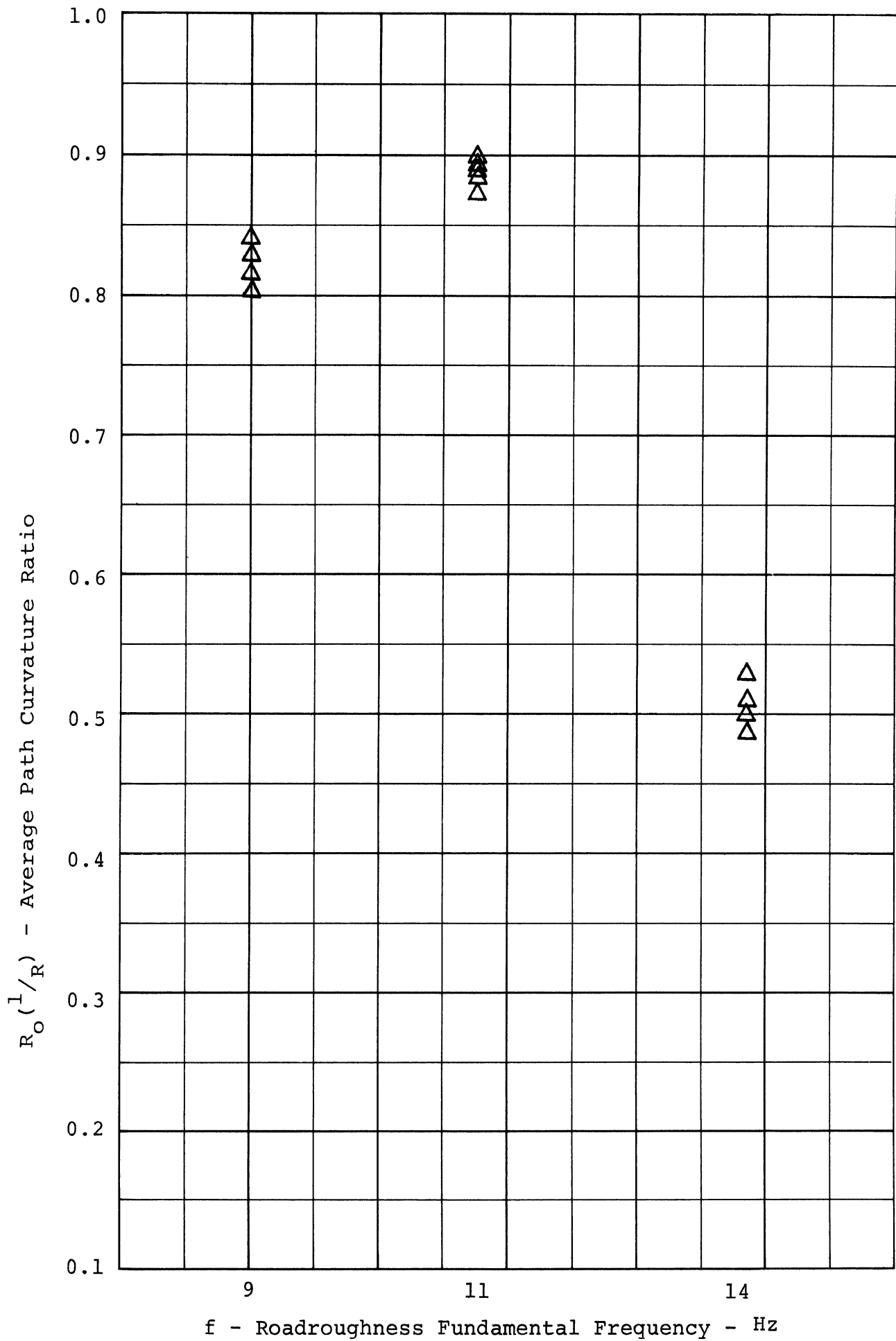
ROADHOLDING IN A TURN - IMPERIAL



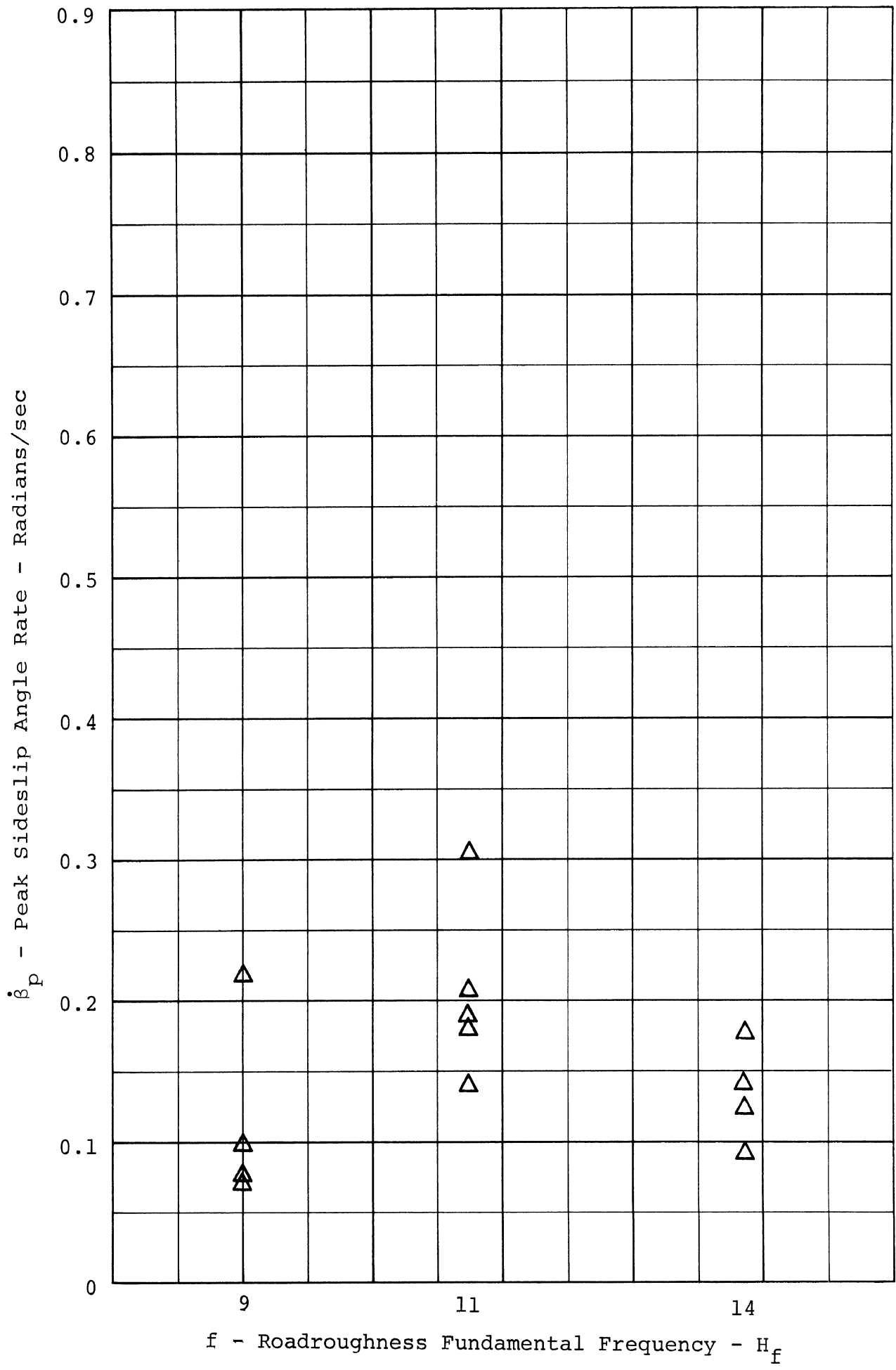




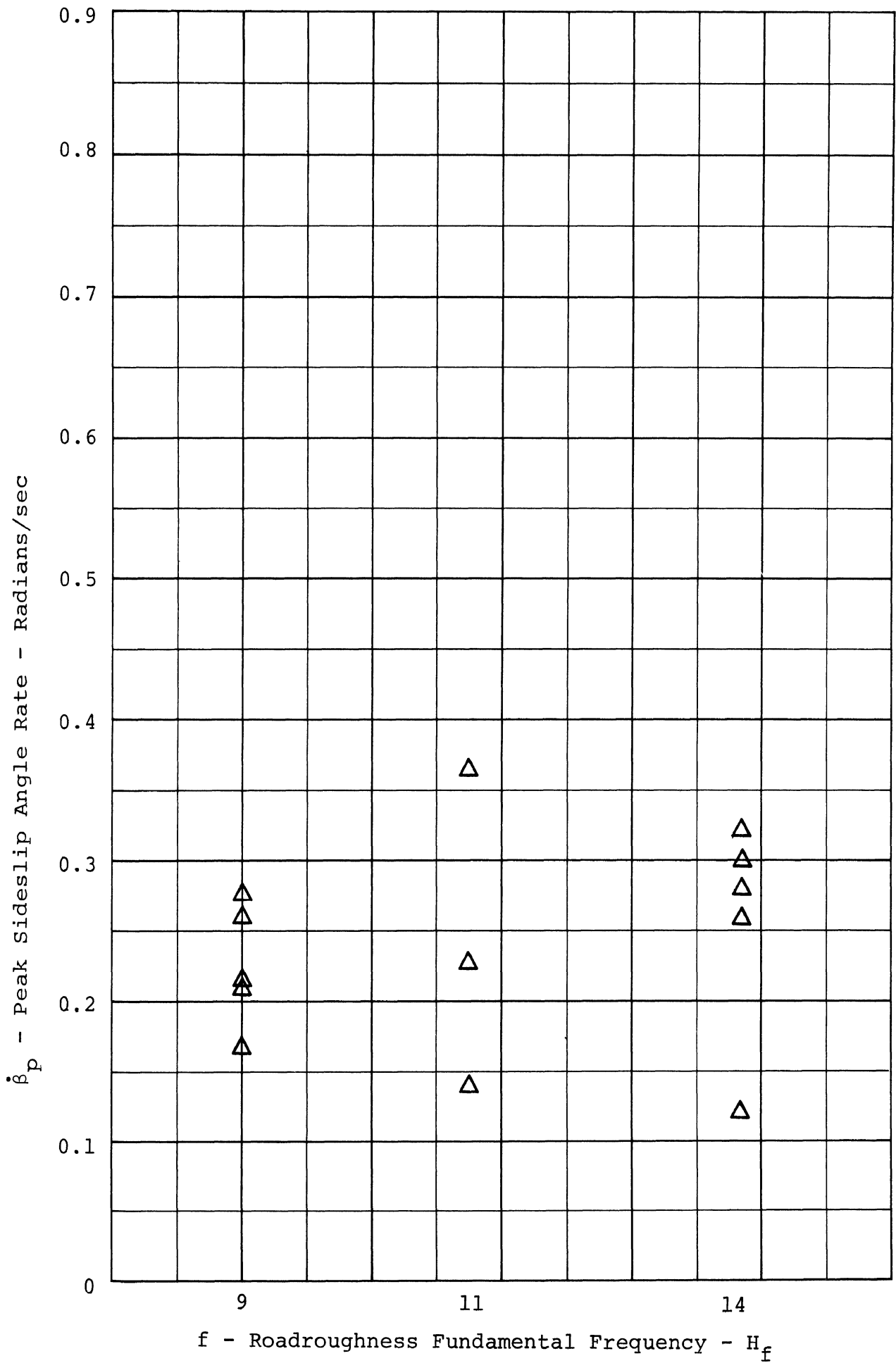
ROADHOLDING IN A TURN - TORONADO



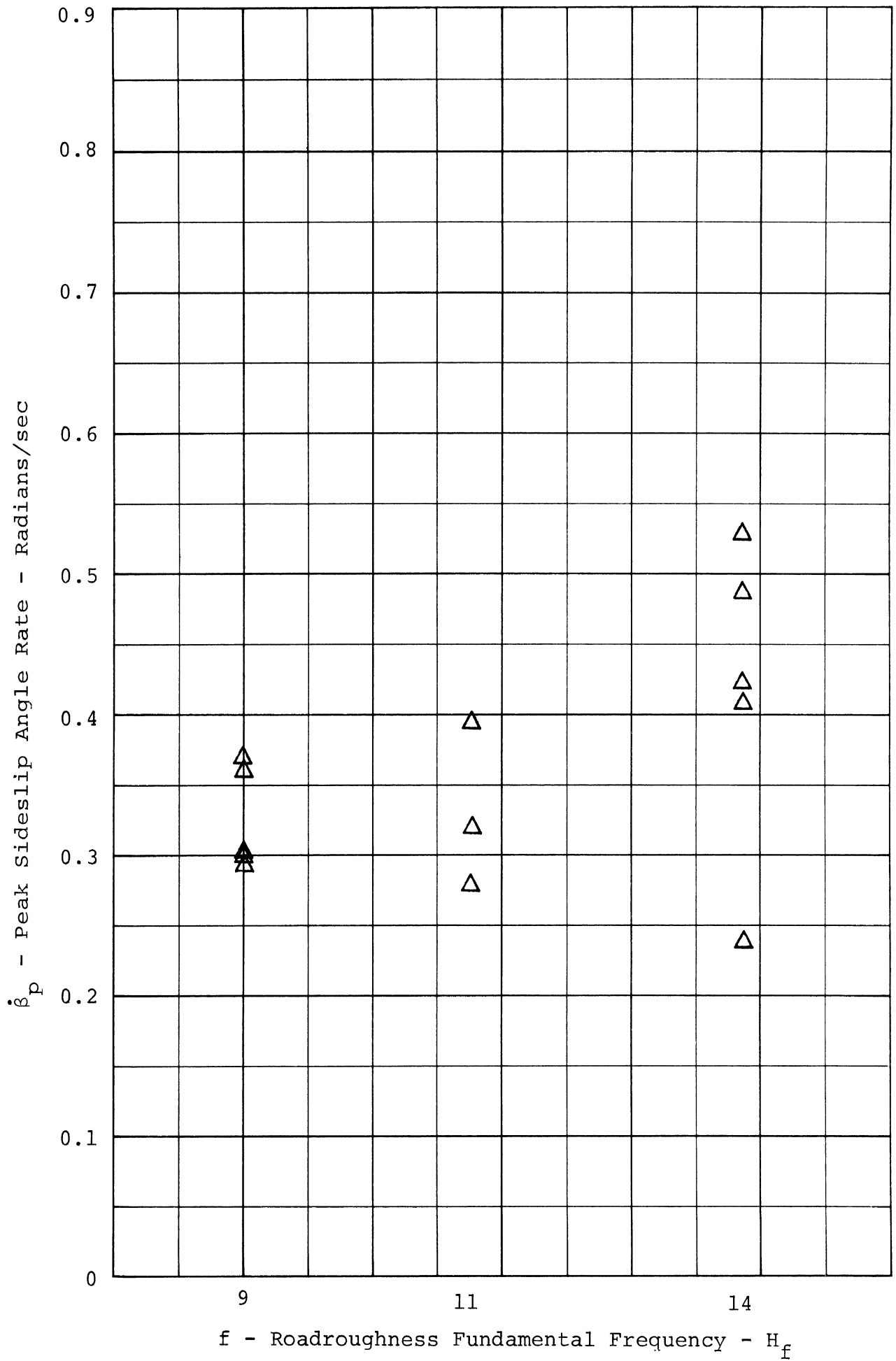
ROADHOLDING IN A TURN - VW



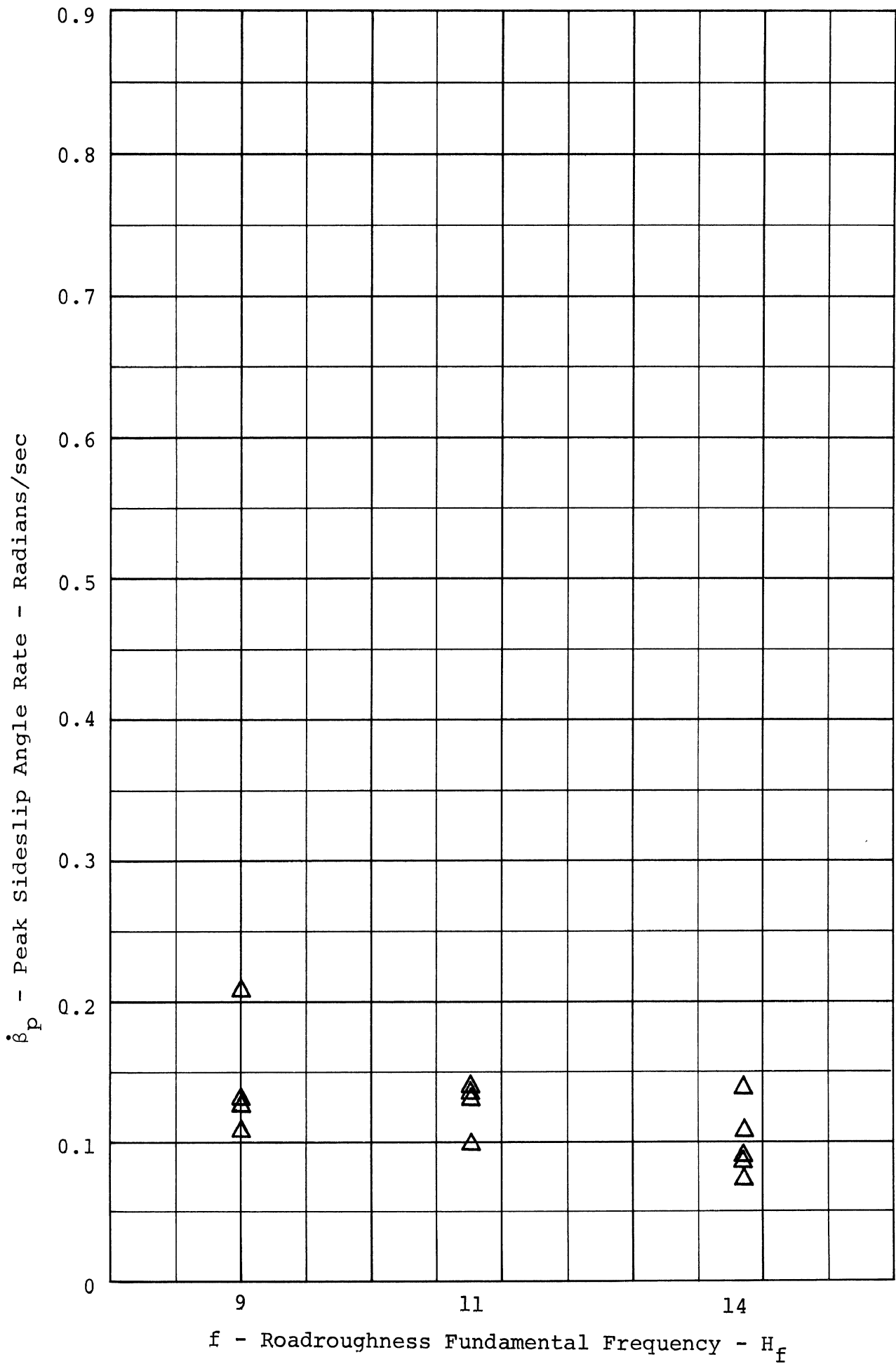
ROADHOLDING IN A TURN - AMBASSADOR



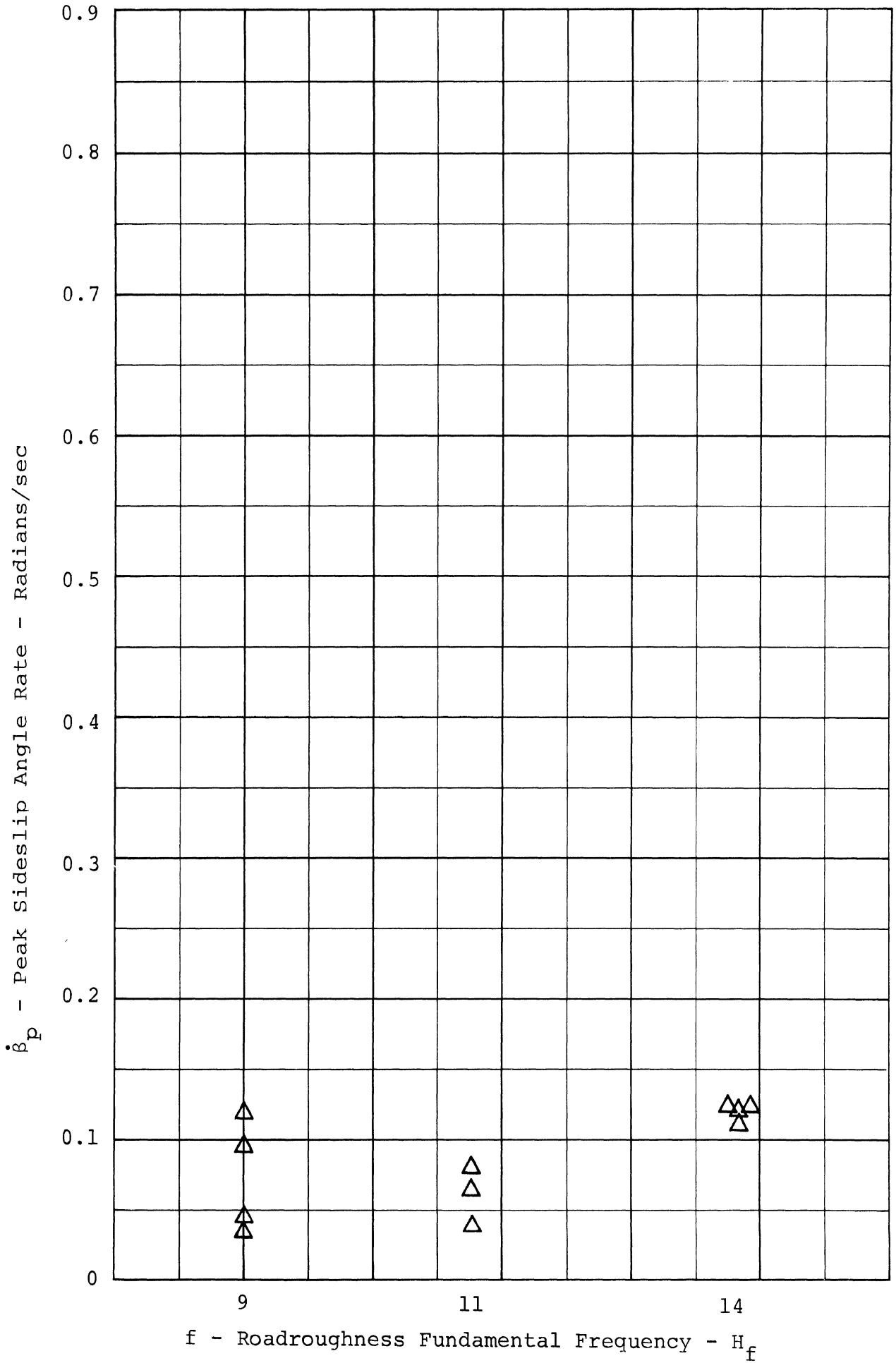
ROADHOLDING IN A TURN - AUSTIN



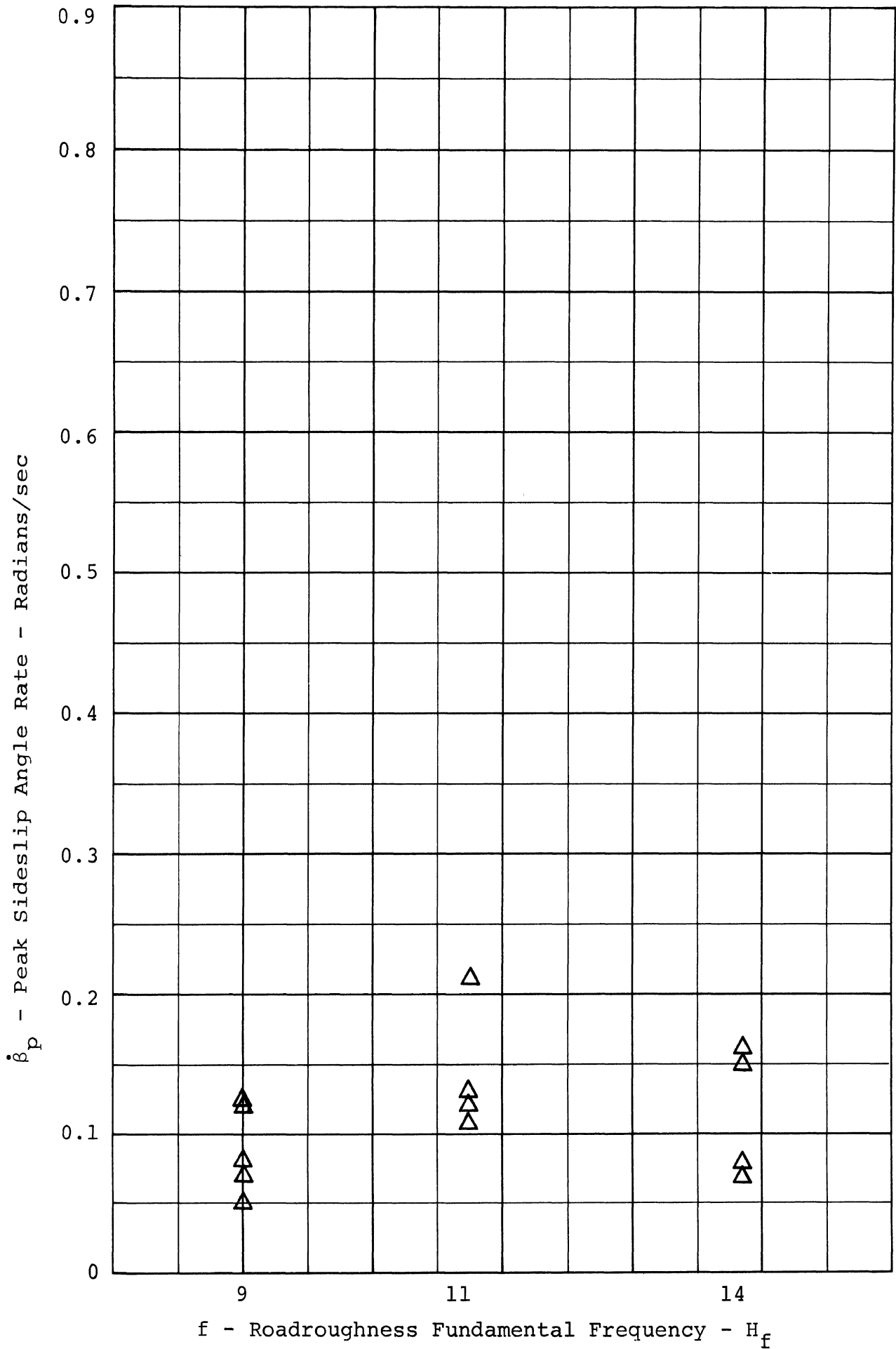
ROADHOLDING IN A TURN - CHEVROLET



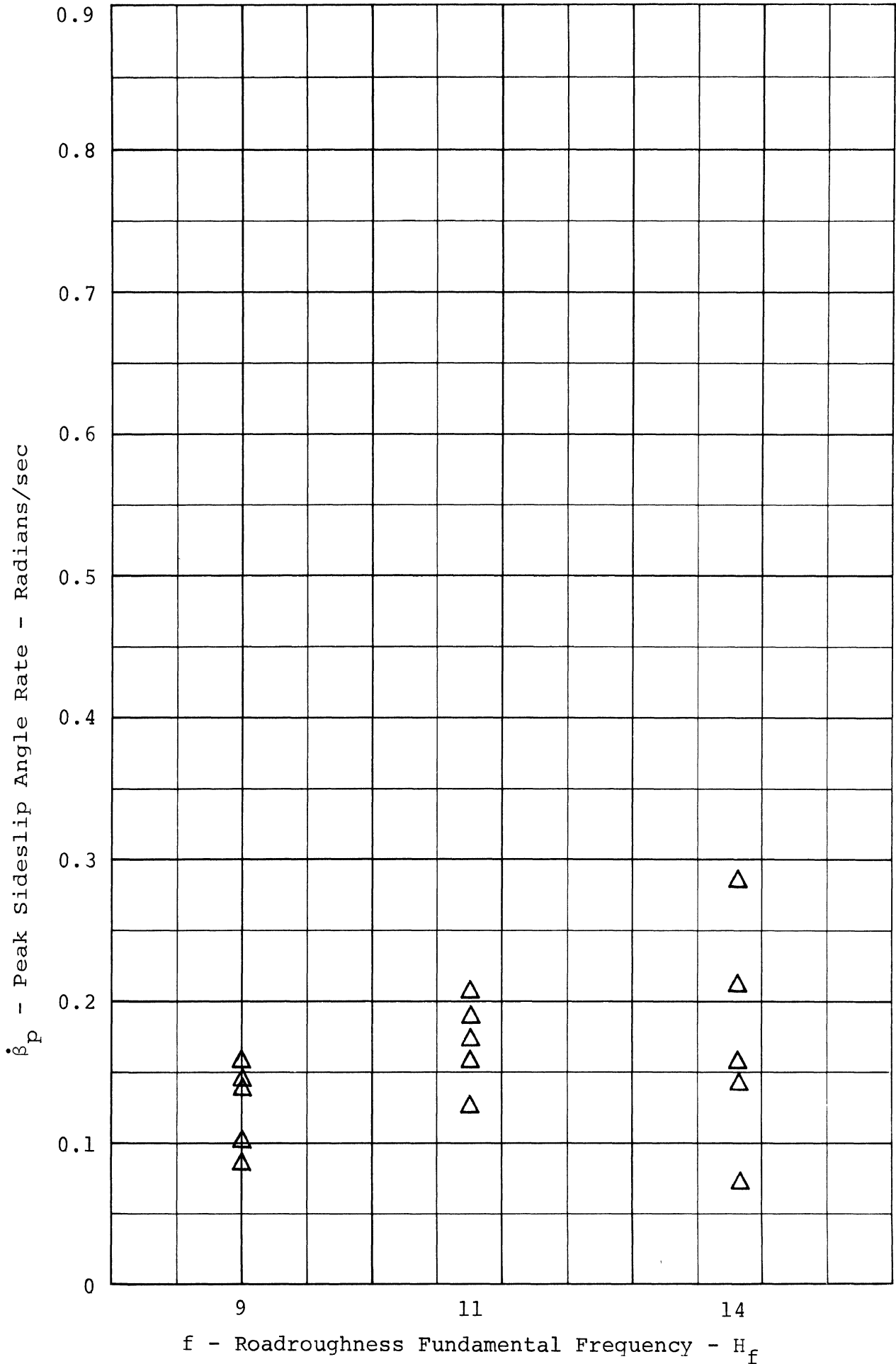
ROADHOLDING IN A TURN - DODGE



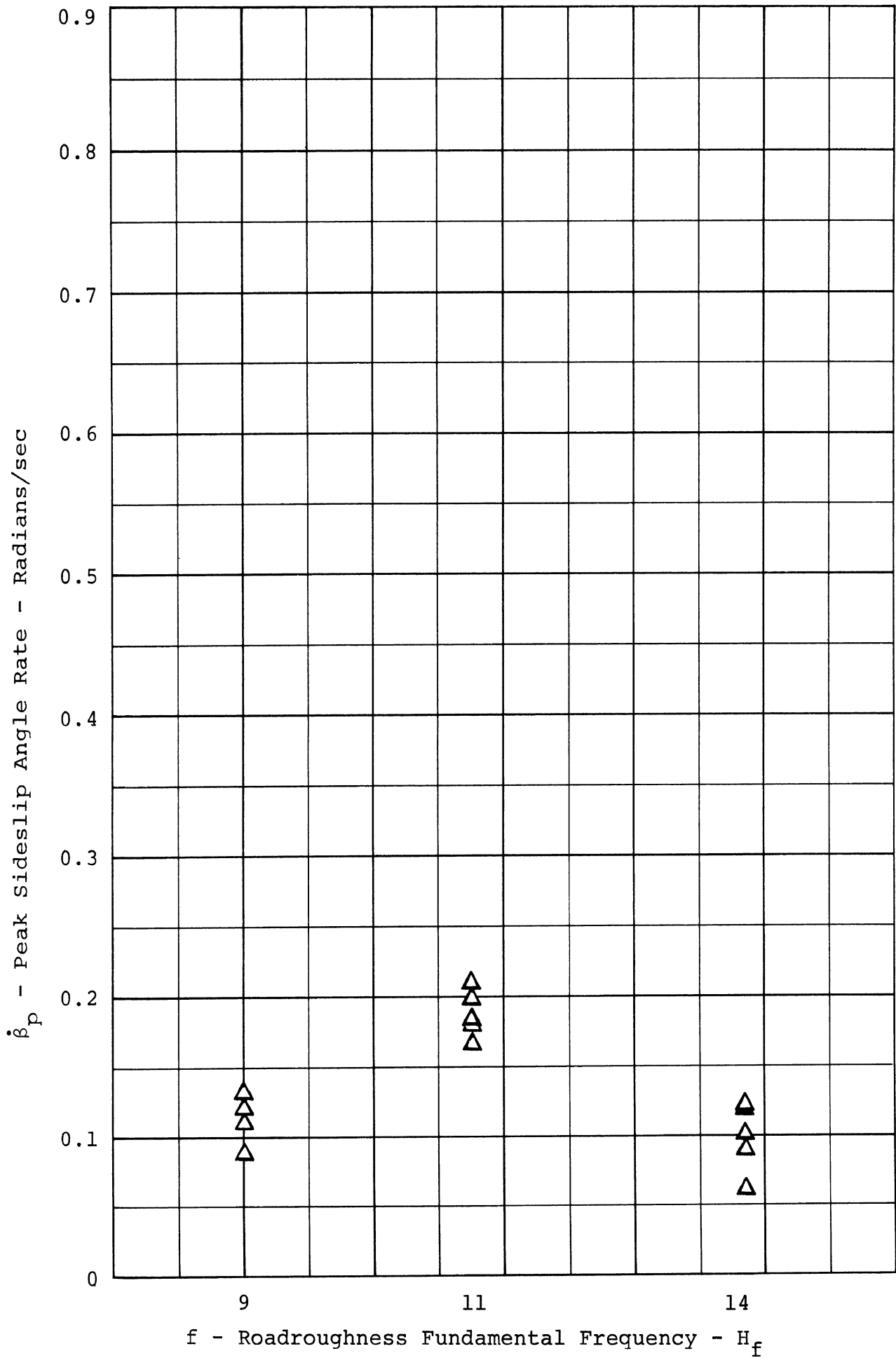
ROADHOLDING IN A TURN - FIREBIRD



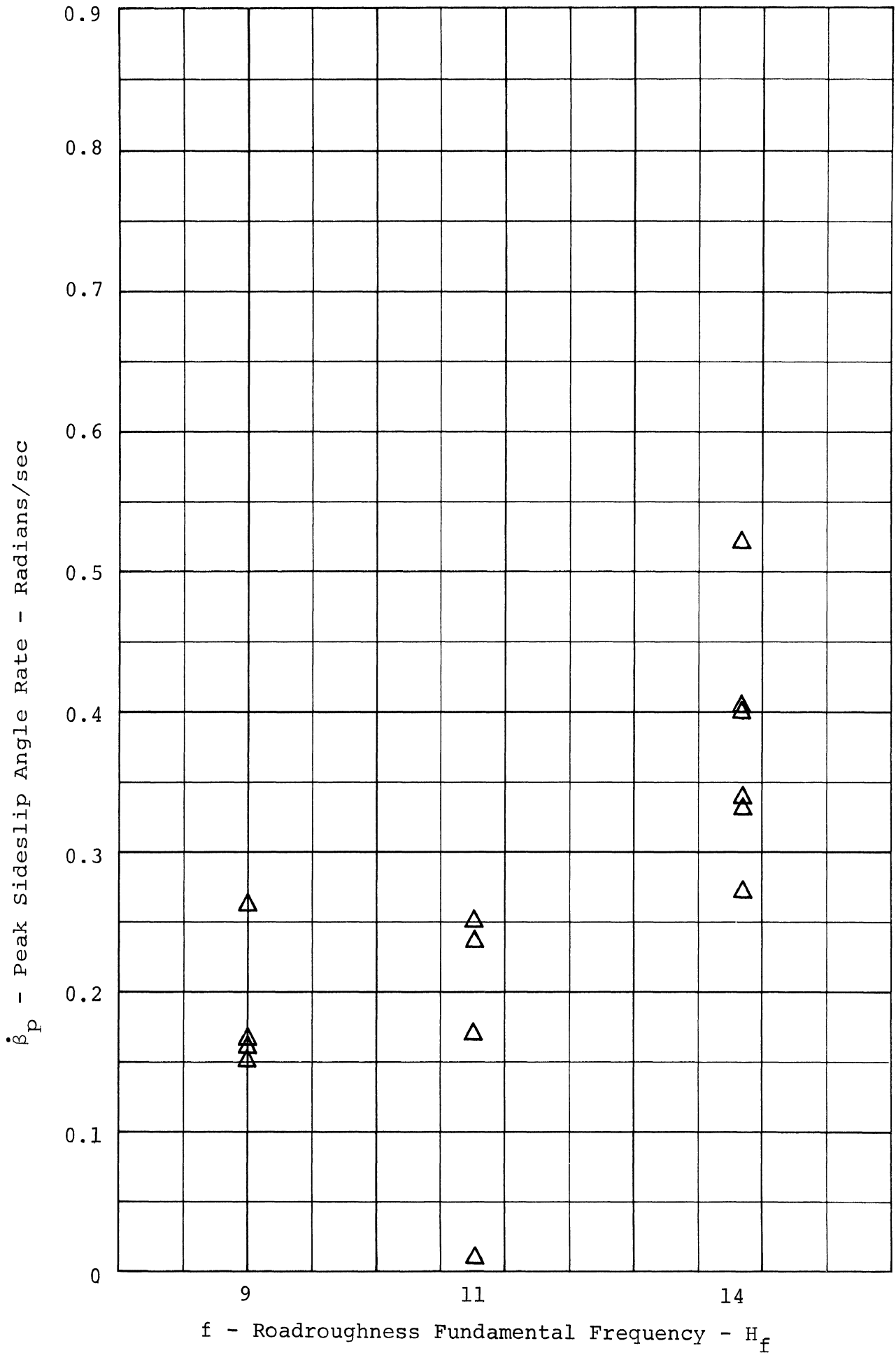
ROADHOLDING IN A TURN - GALAXIE



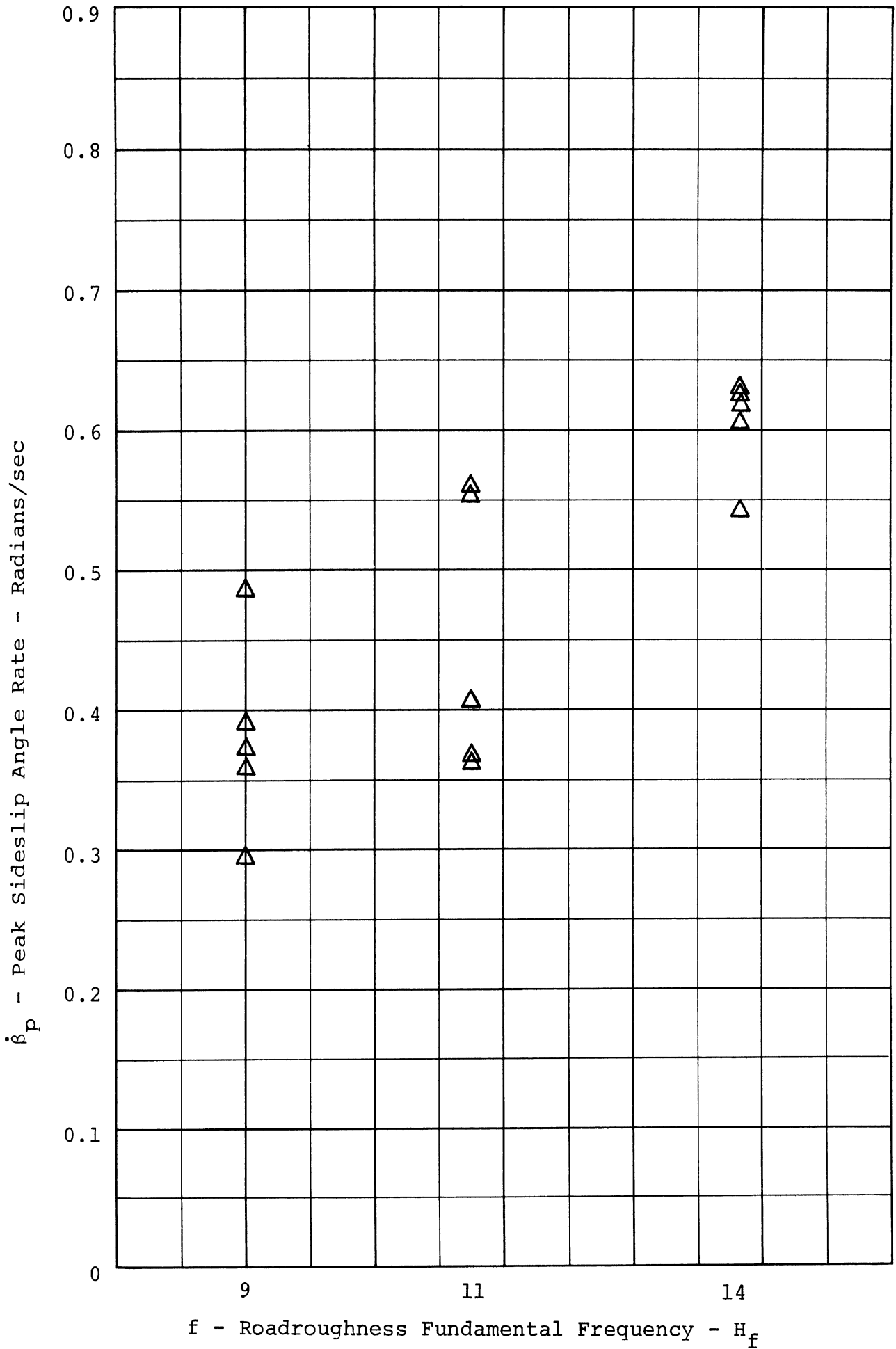
ROADHOLDING IN A TURN - GREMLIN



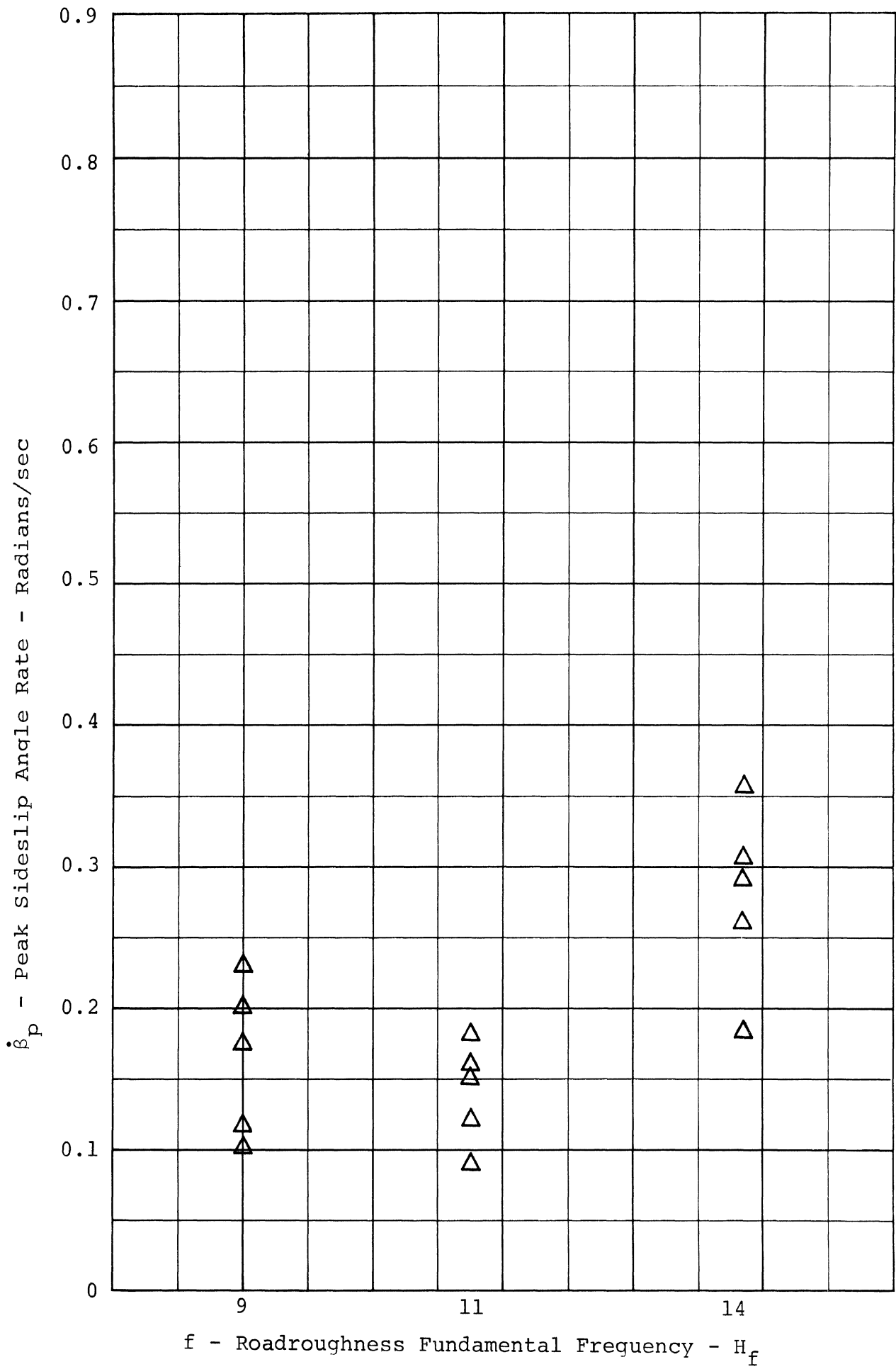
ROADHOLDING IN A TURN - IMPERIAL



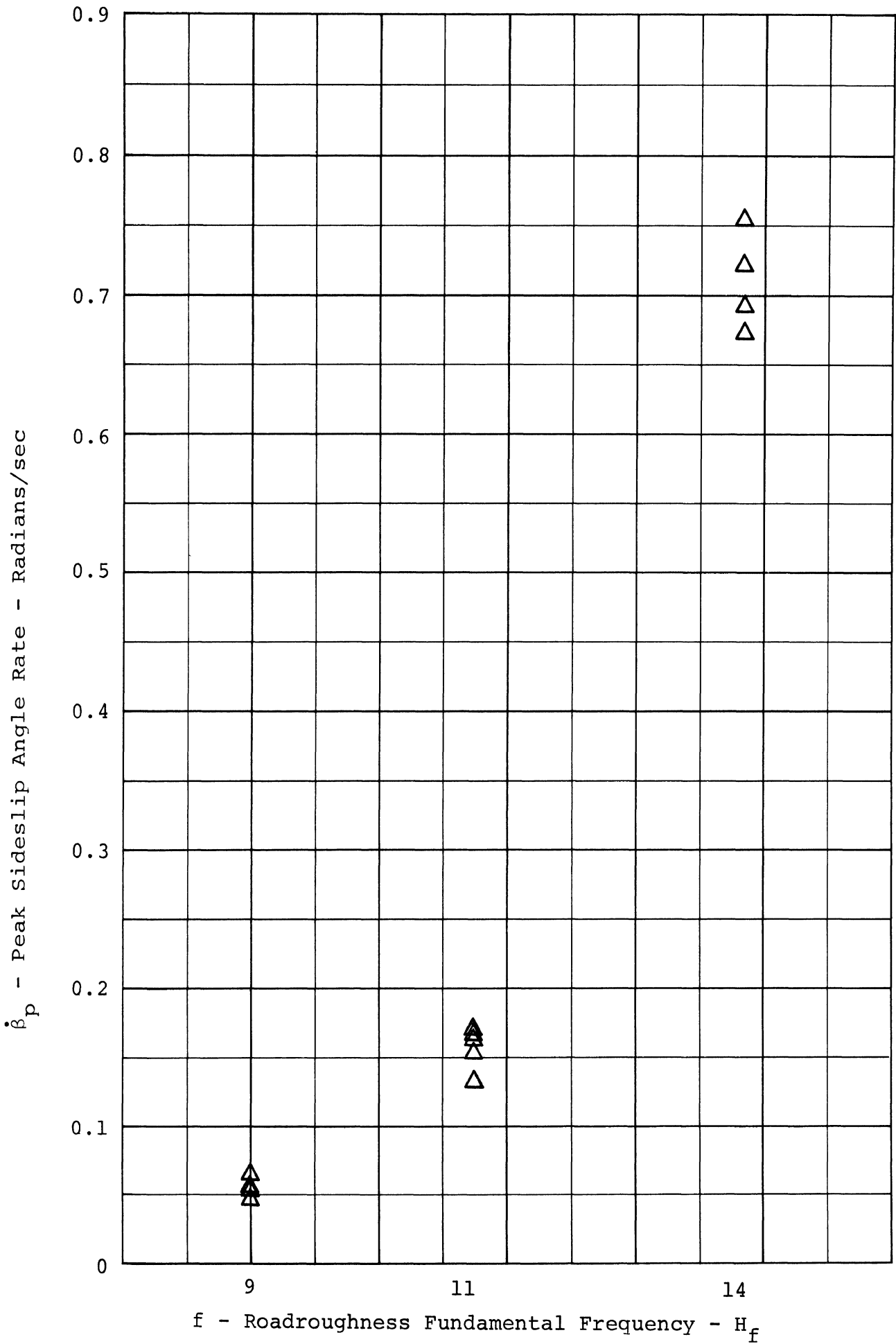
ROADHOLDING IN A TURN - LOTUS



ROADHOLDING IN A TURN - MERCEDES



ROADHOLDING IN A TURN - TORONADO



ROADHOLDING IN A TURN - VW

VHTP #4 - TRAPEZOIDAL STEER

A_{yP} - Peak Lateral Acceleration

N - Test Runs

σ' - Normalized Steer Angle, or Nominal Front Wheel Steer Angle

r_p - Peak Yaw Rate

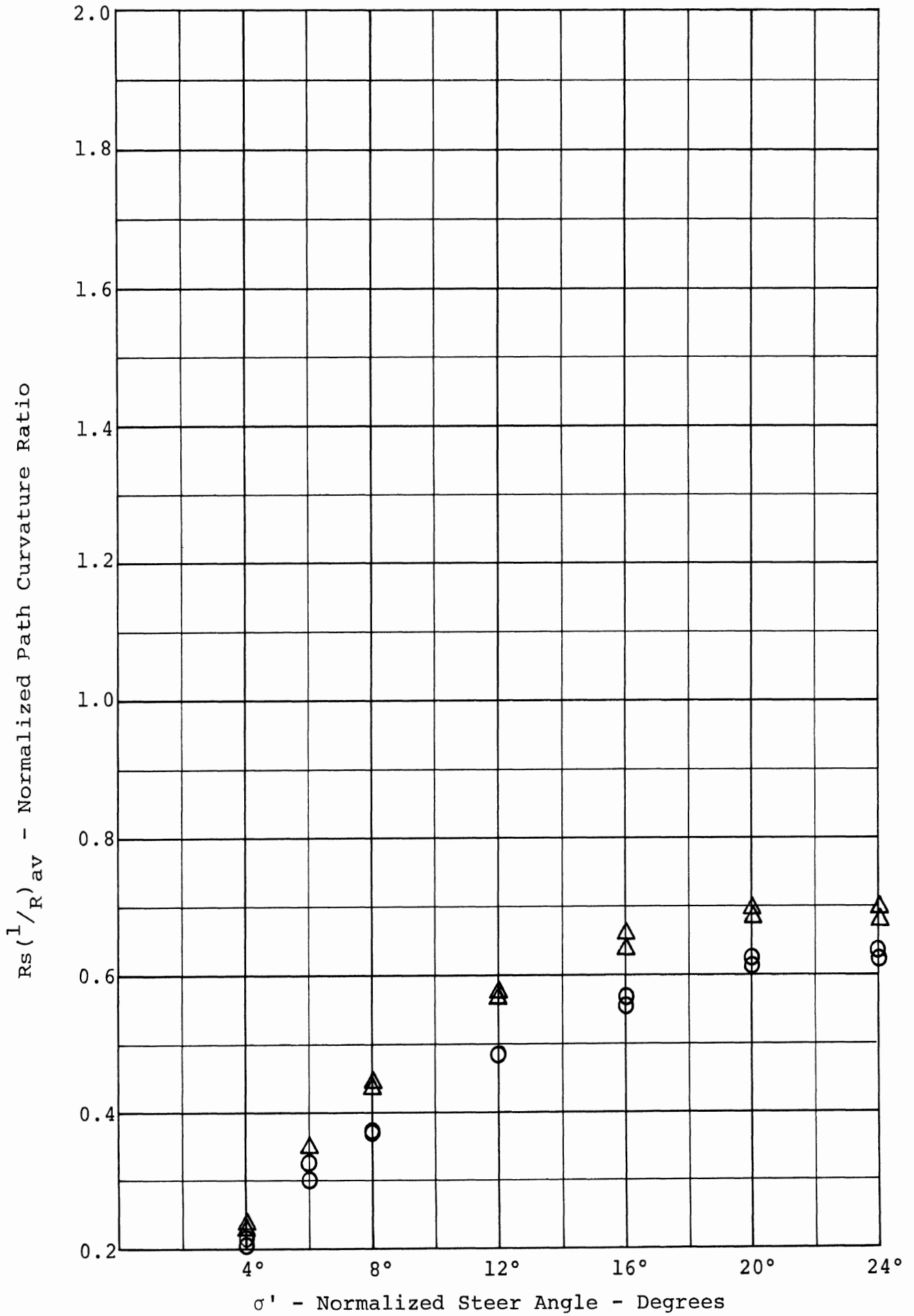
$R_s(1/R)_{ave}$ - Path Curvature Response Averaged Over Two Seconds and Ratioed to a Reference Path Curvature Deriving from a Steady Turn of 40 mph and 1.0g A_y

$\dot{\beta}_p$ - Peak Vehicle Sideslip Angular Rate

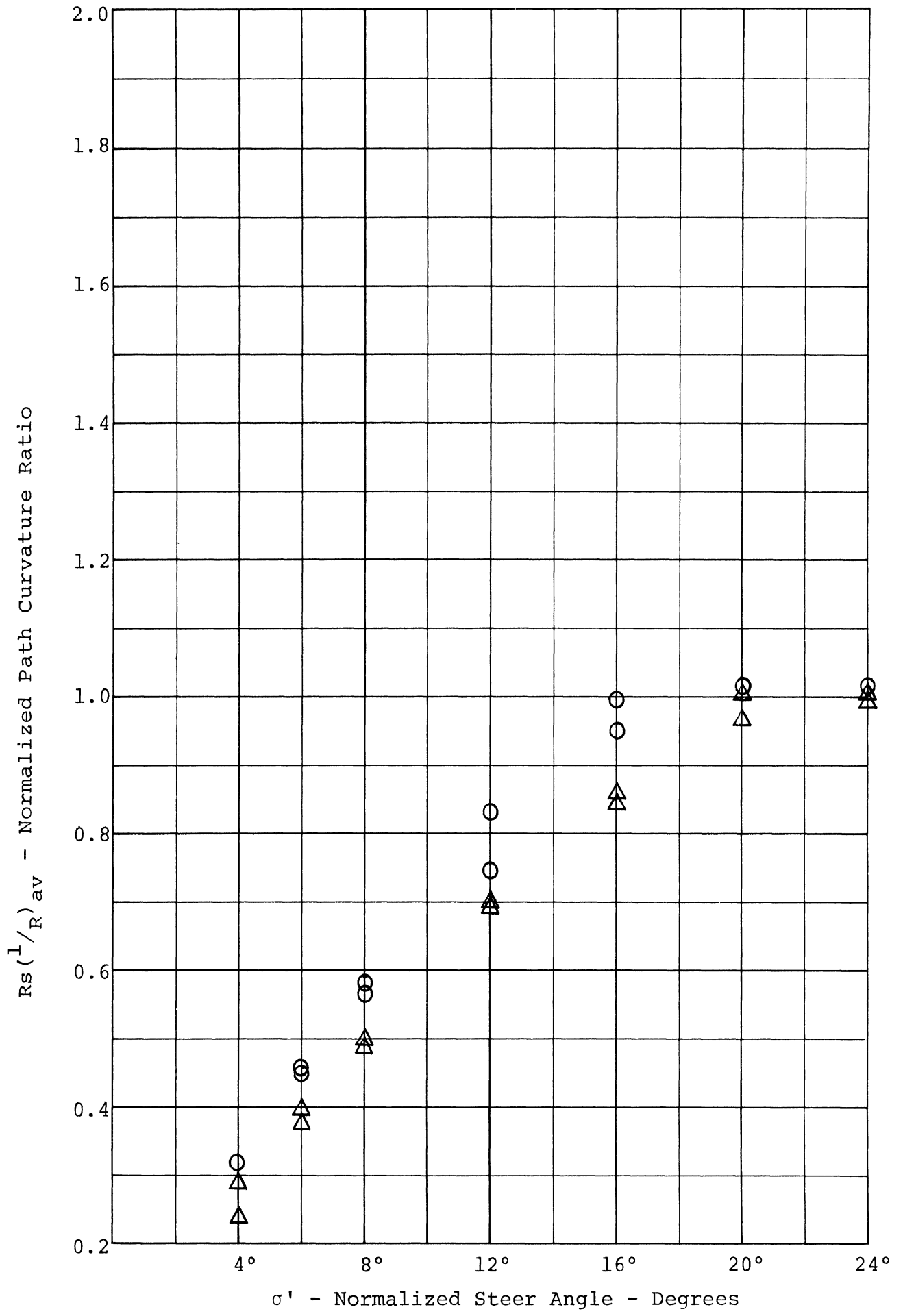
β_p - Peak Vehicle Sideslip Angle

Δ - Indicates Left Turn

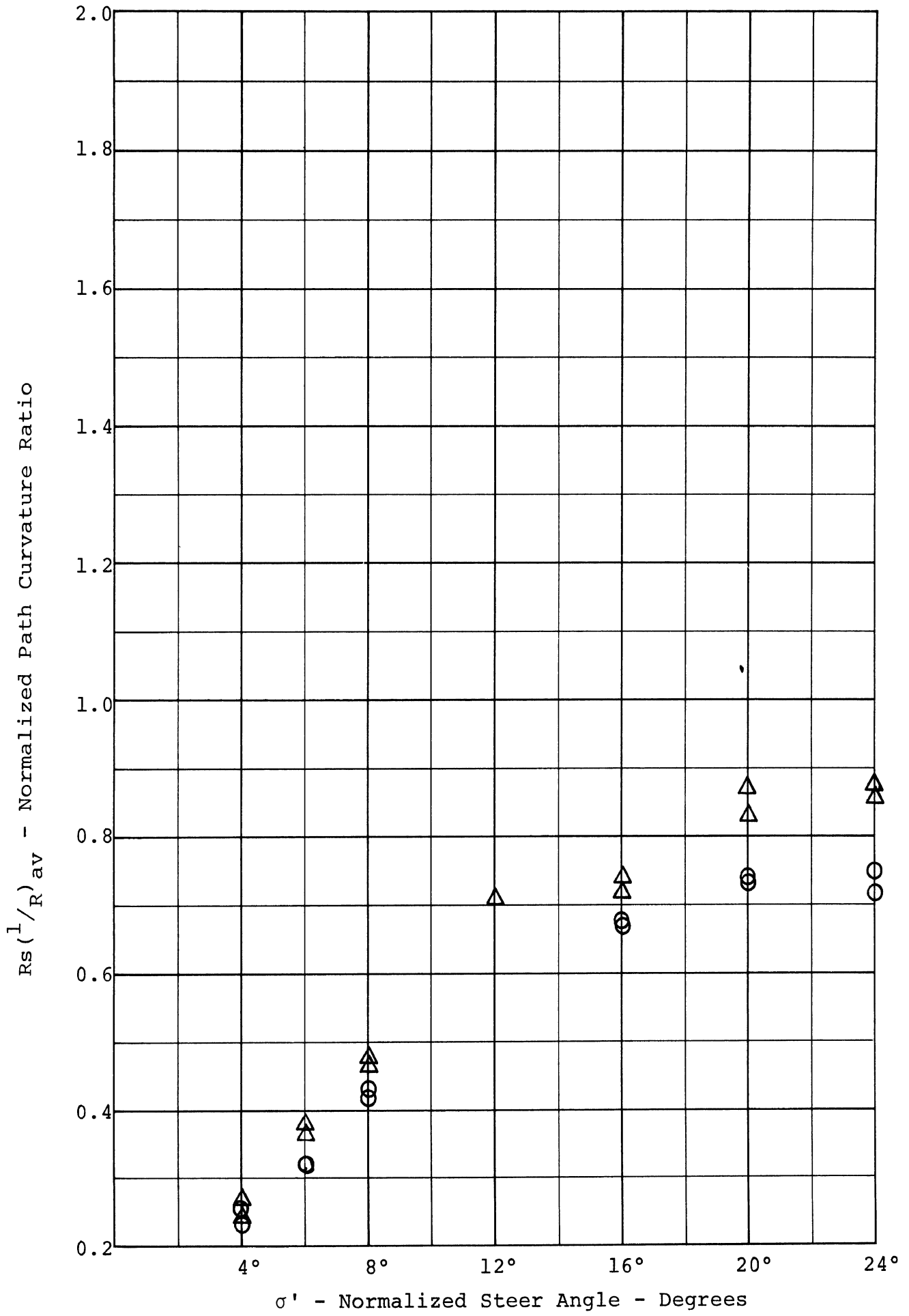
\bigcirc - Indicates Right Turn



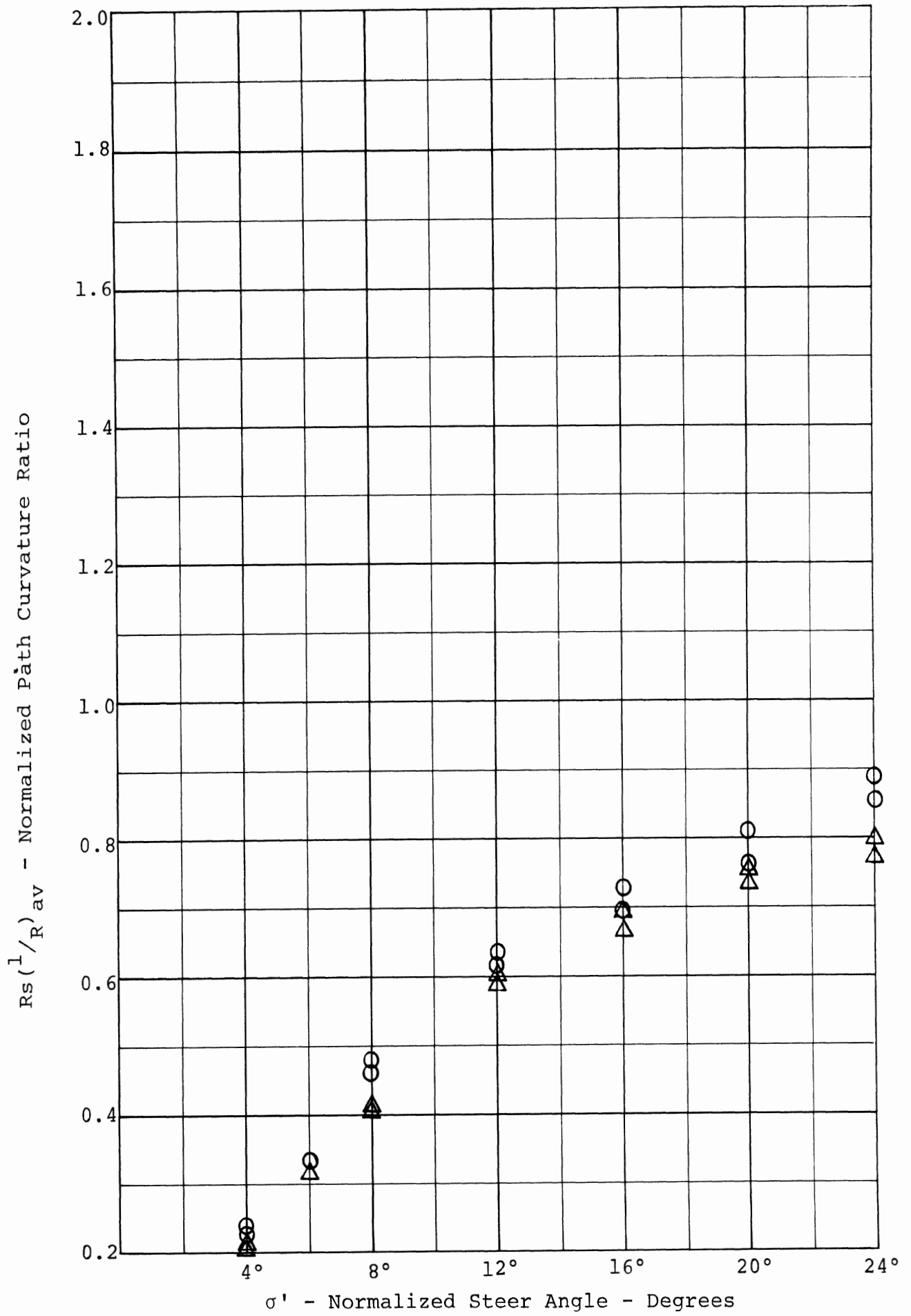
TRAPEZOIDAL STEER - AMBASSADOR



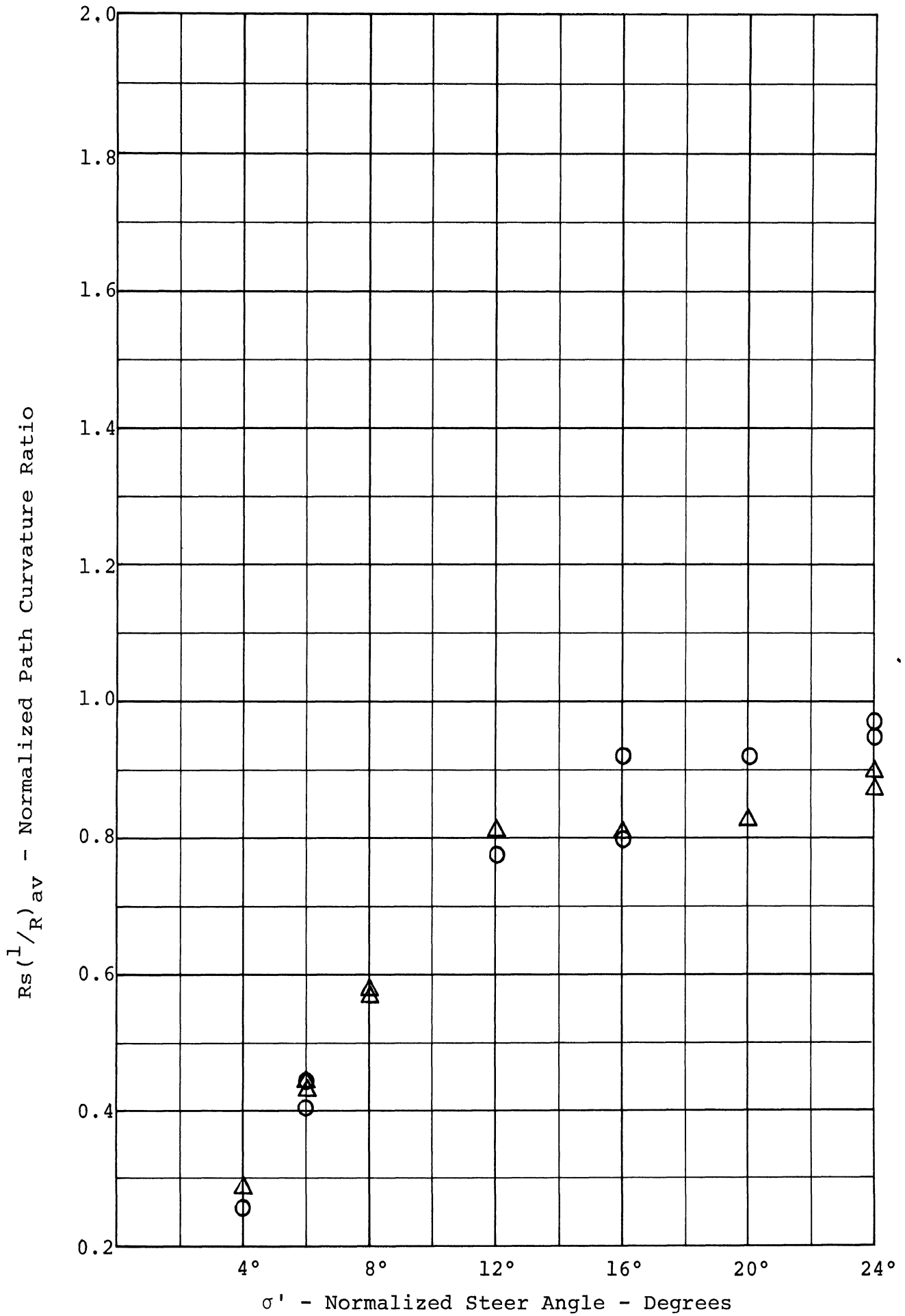
TRAPEZOIDAL STEER - AUSTIN



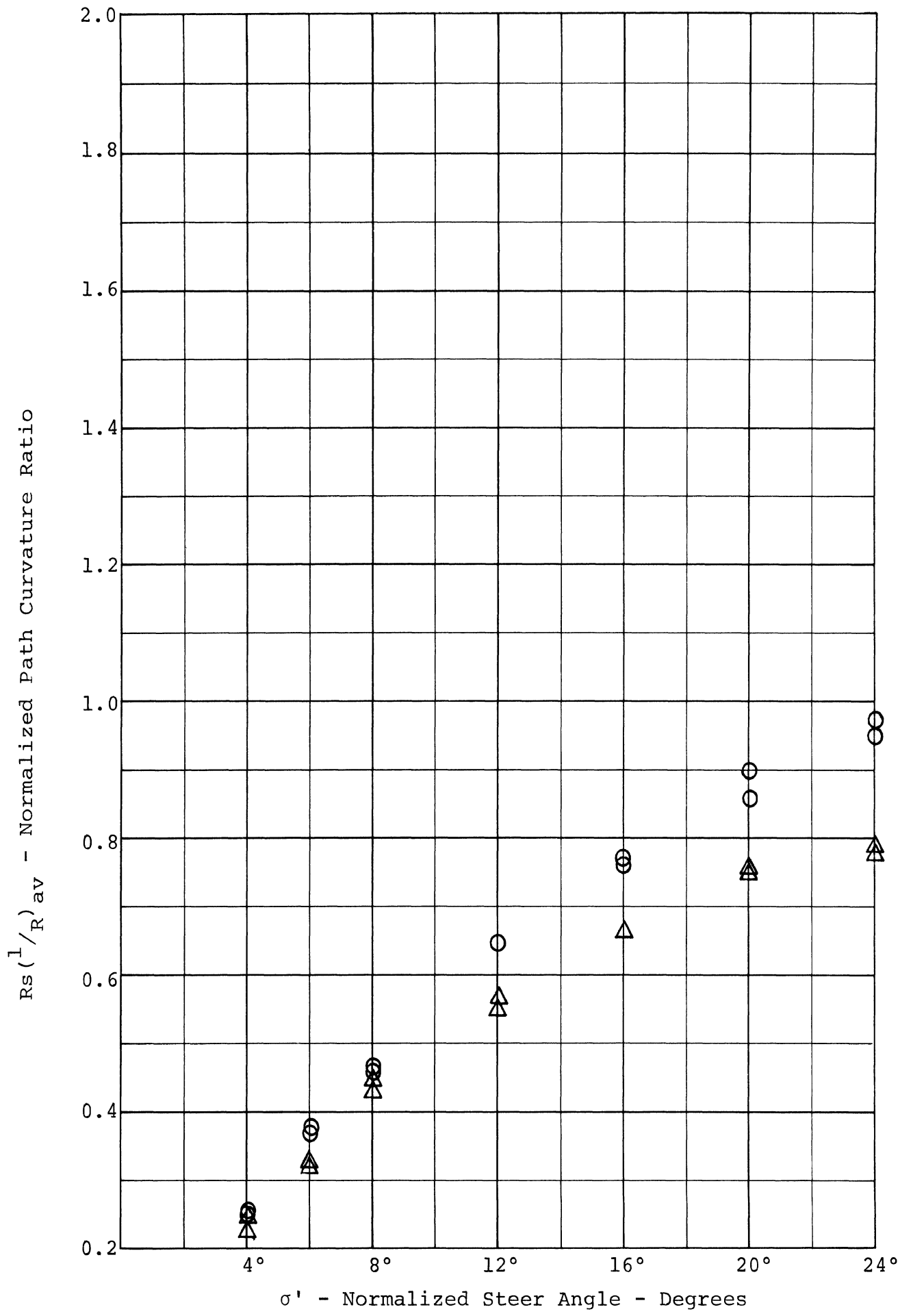
TRAPEZOIDAL STEER - BROOKWOOD



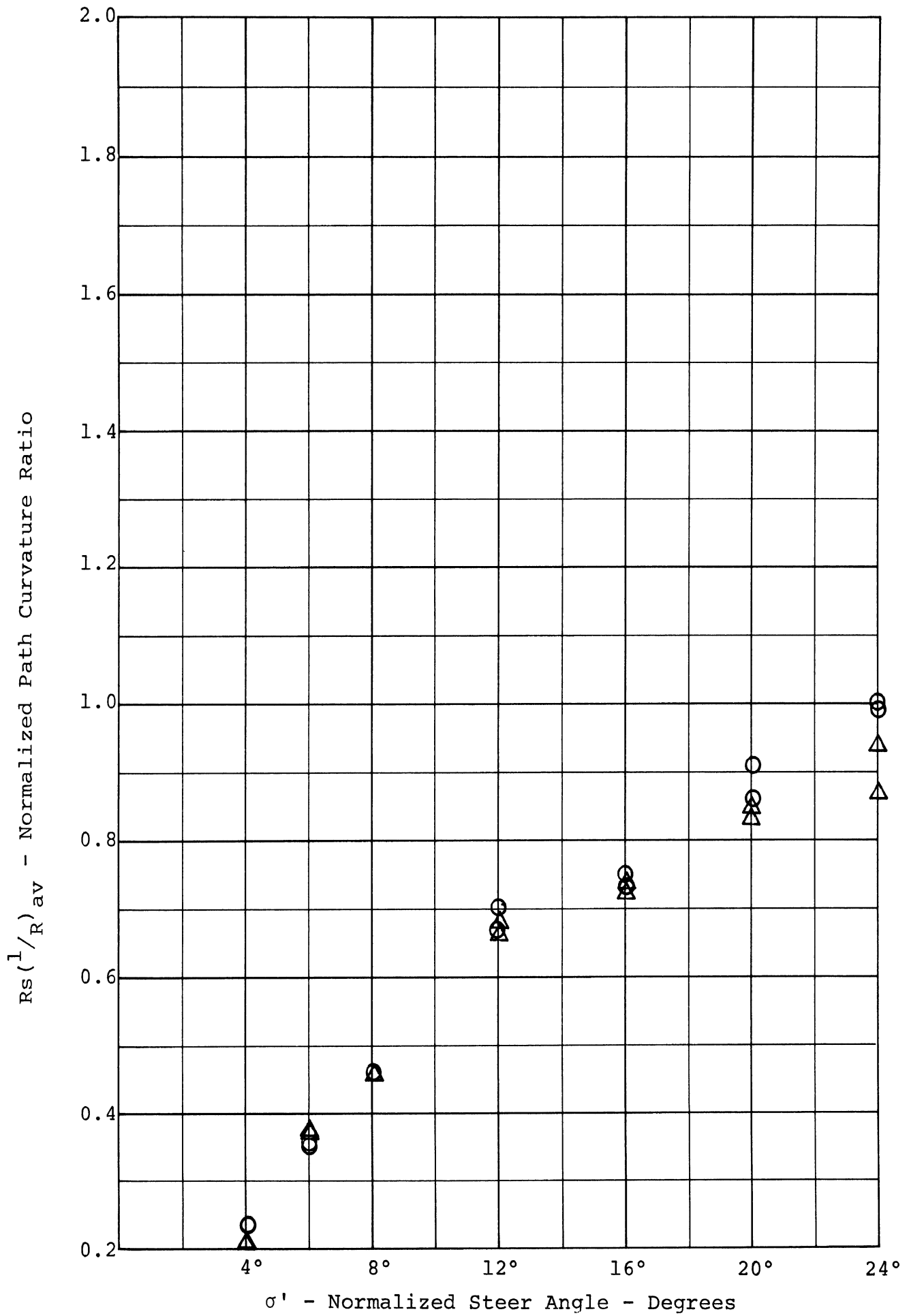
TRAPEZOIDAL STEER - DODGE



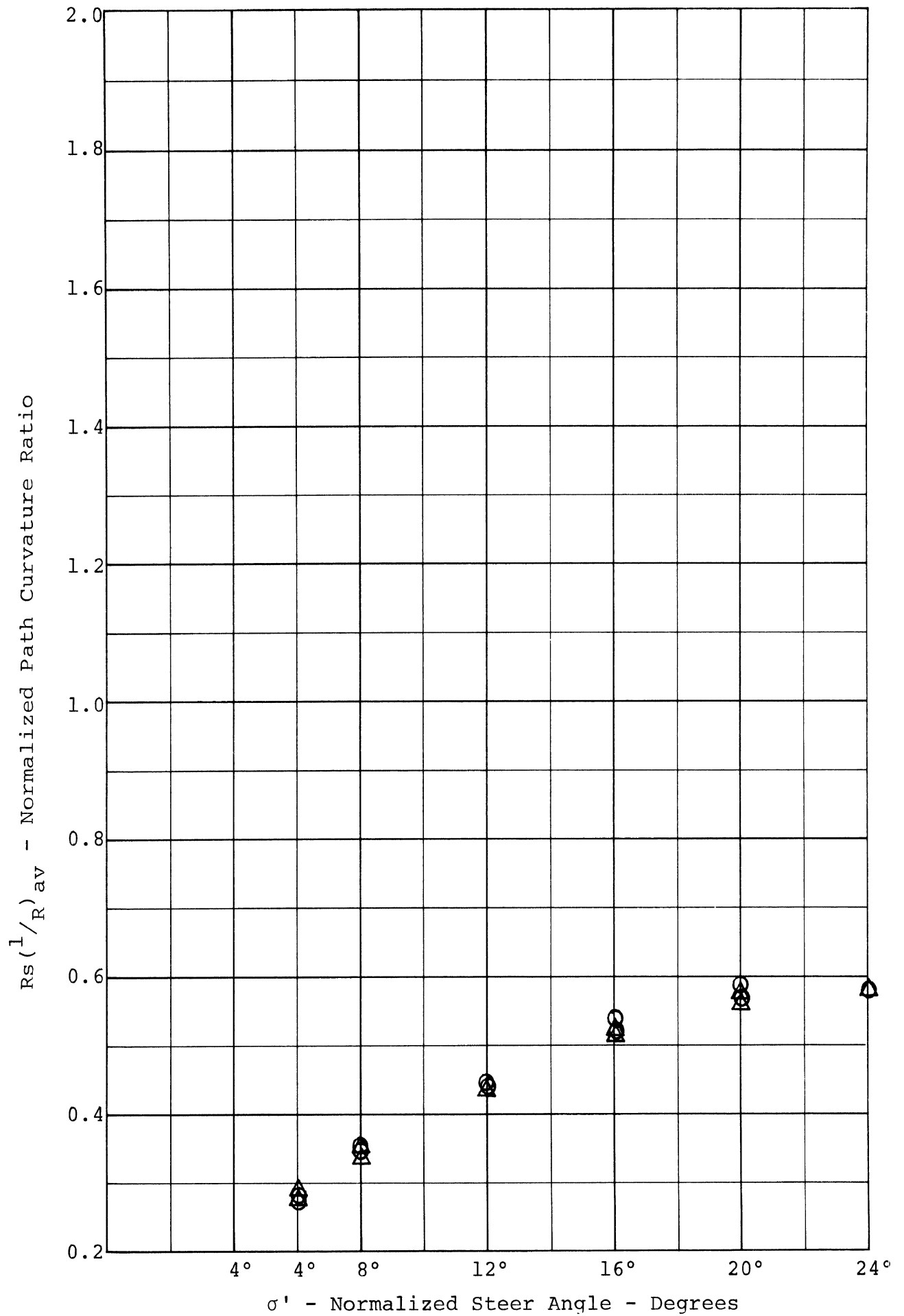
TRAPEZOIDAL STEER - FIREBIRD



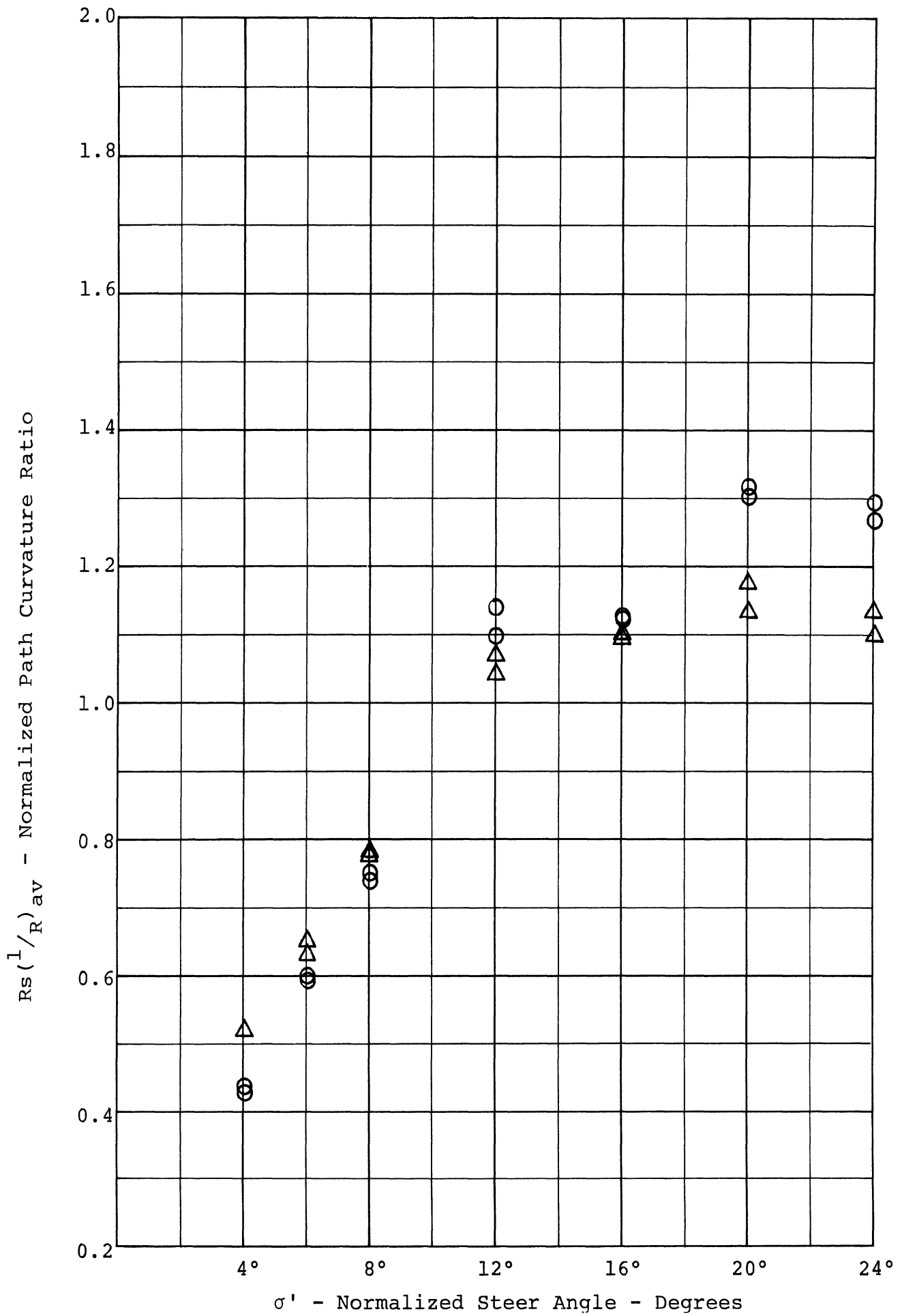
TRAPEZOIDAL STEER - GALAXIE



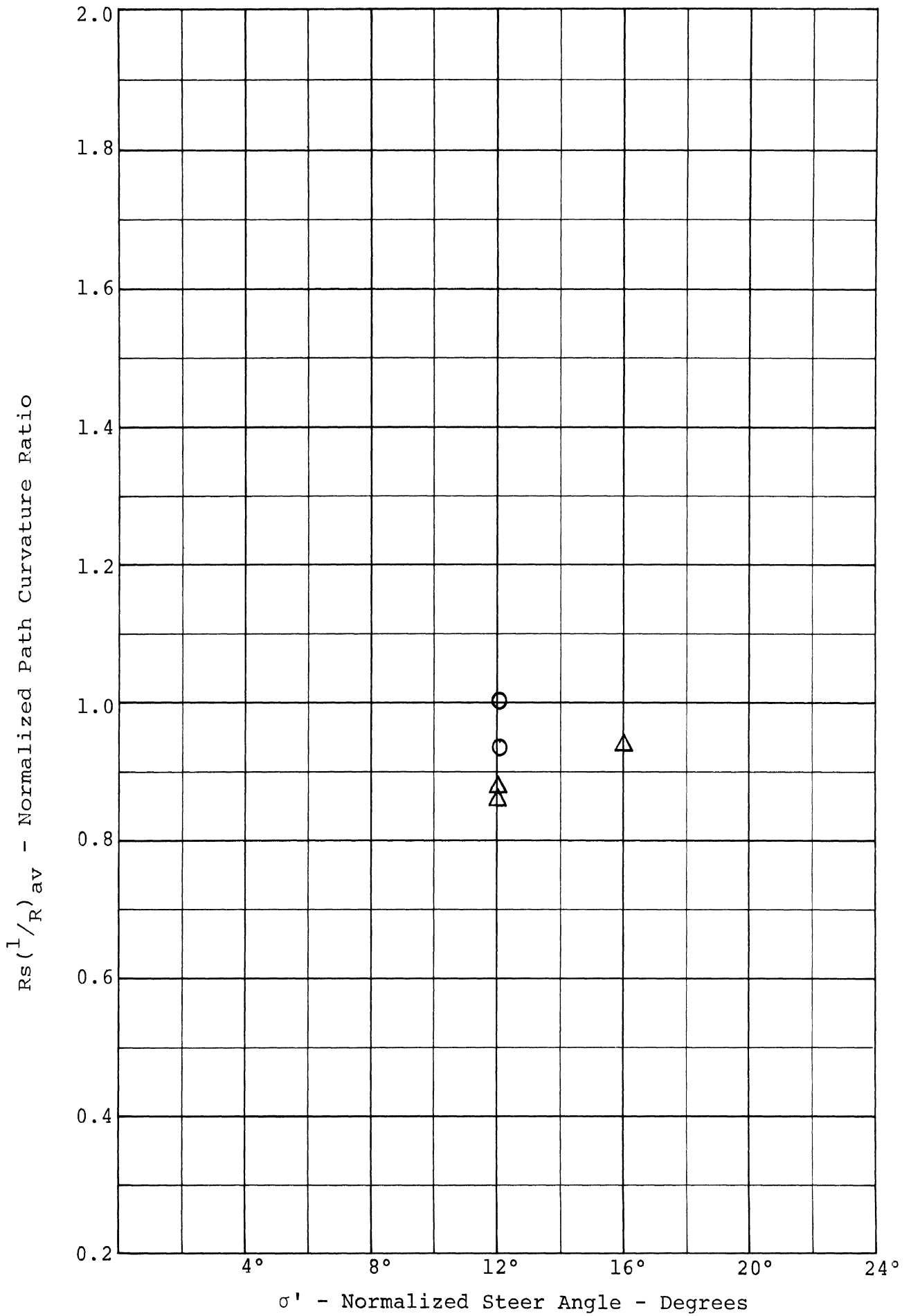
TRAPEZOIDAL STEER - GREMLIN



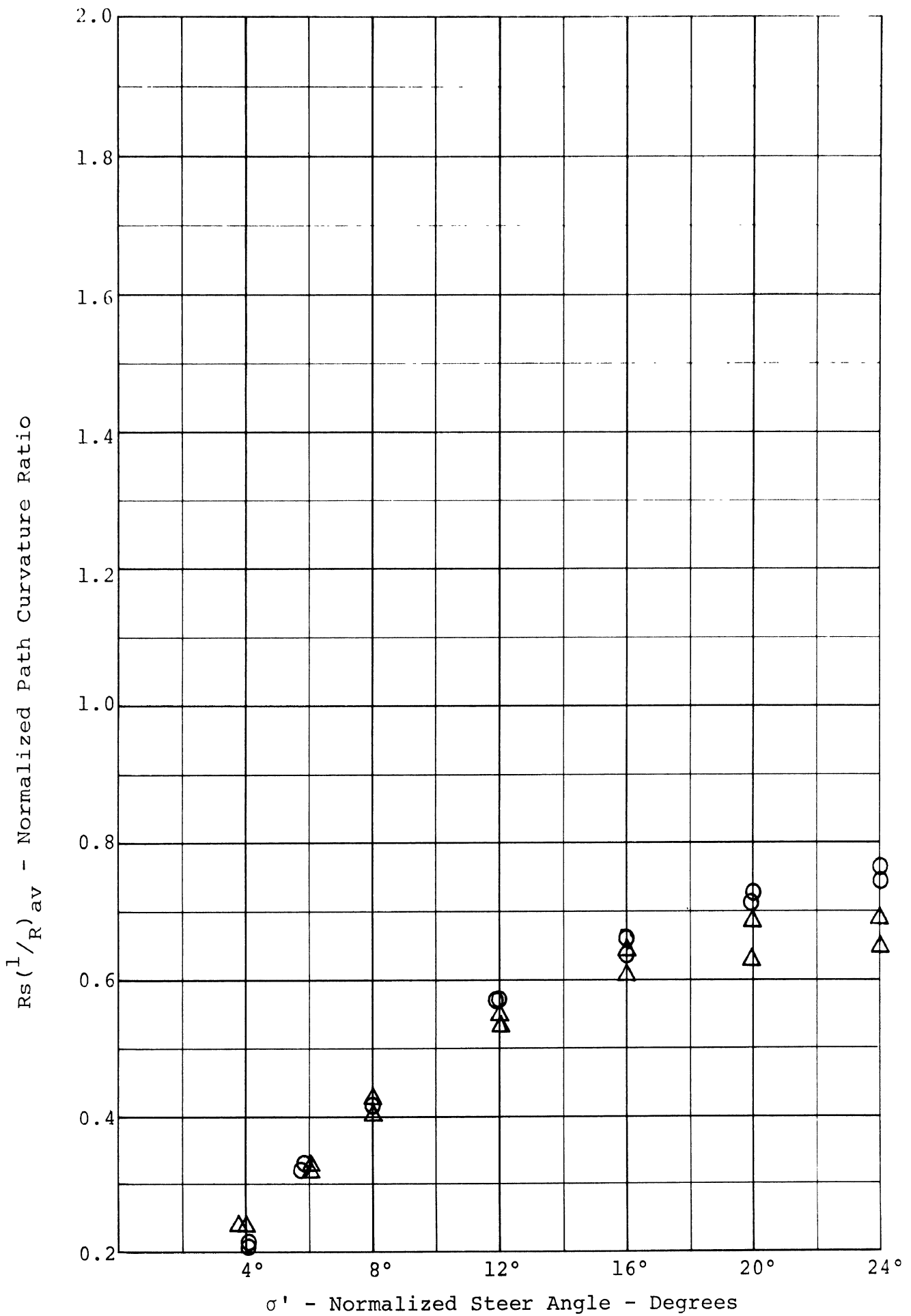
TRAPEZOIDAL STEER - IMPERIAL



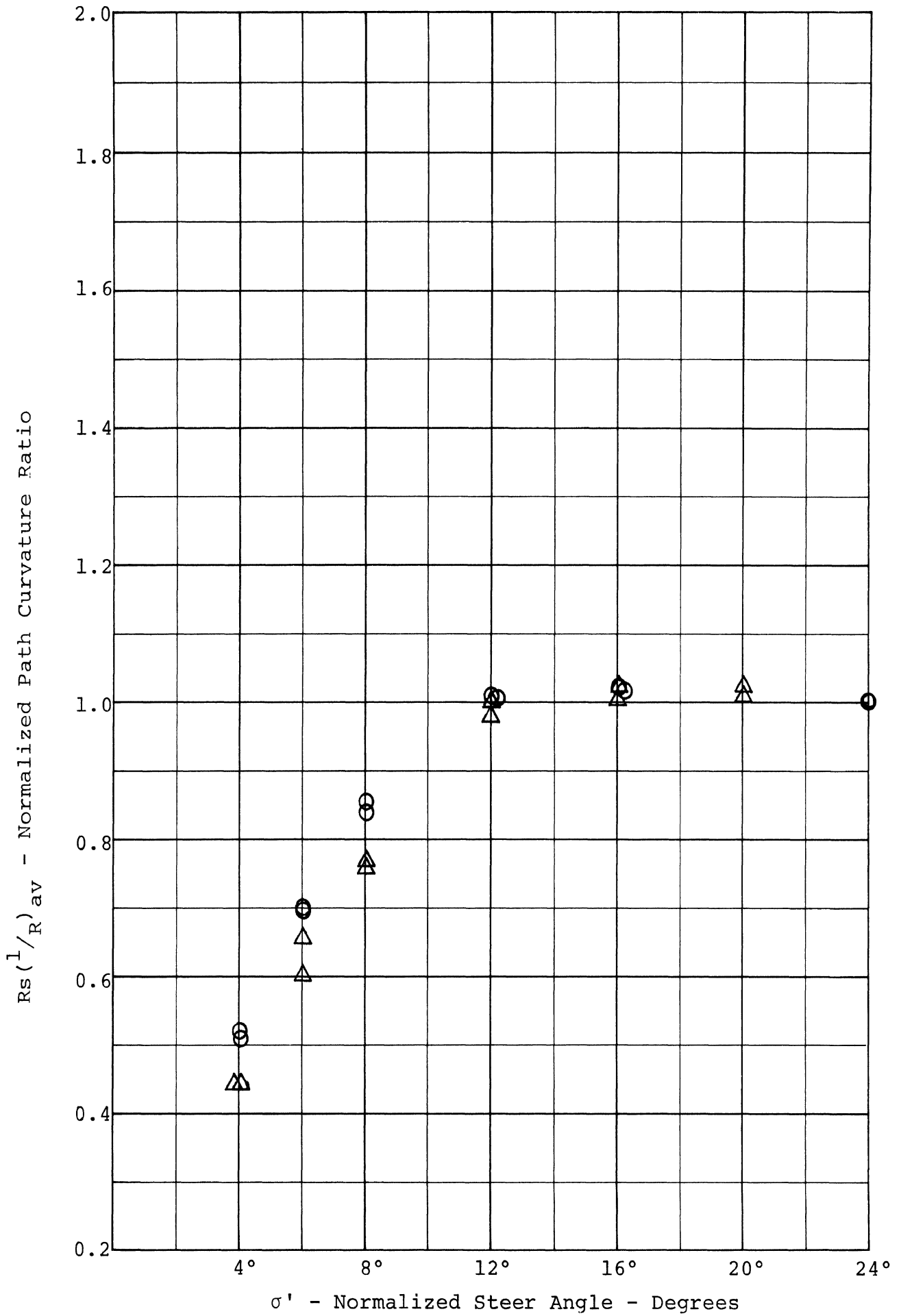
TRAPEZOIDAL STEER - LOTUS



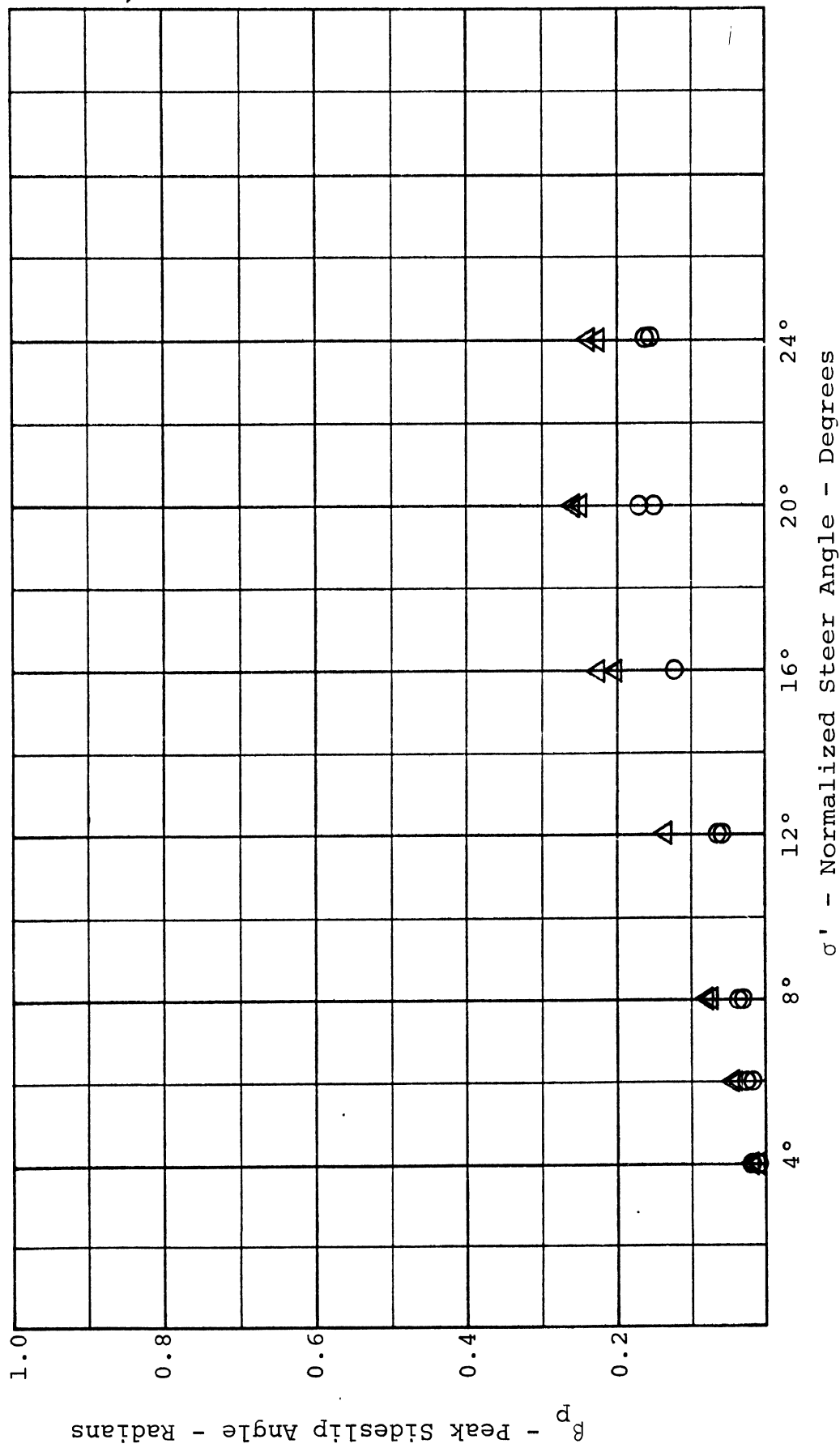
TRAPEZOIDAL STEER - MERCEDES



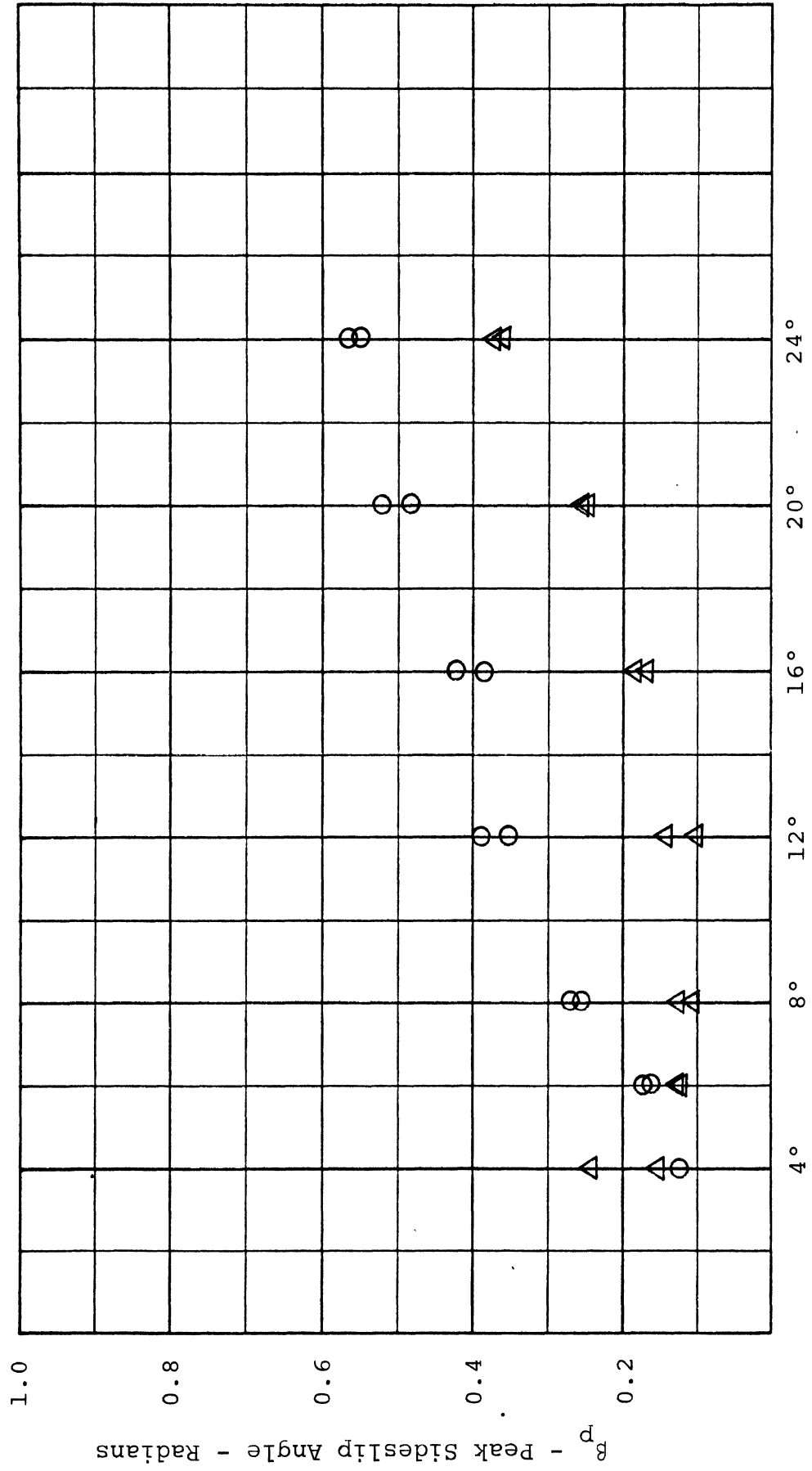
TRAPEZOIDAL STEER - TORONADO



TRAPEZOIDAL STEER - VW

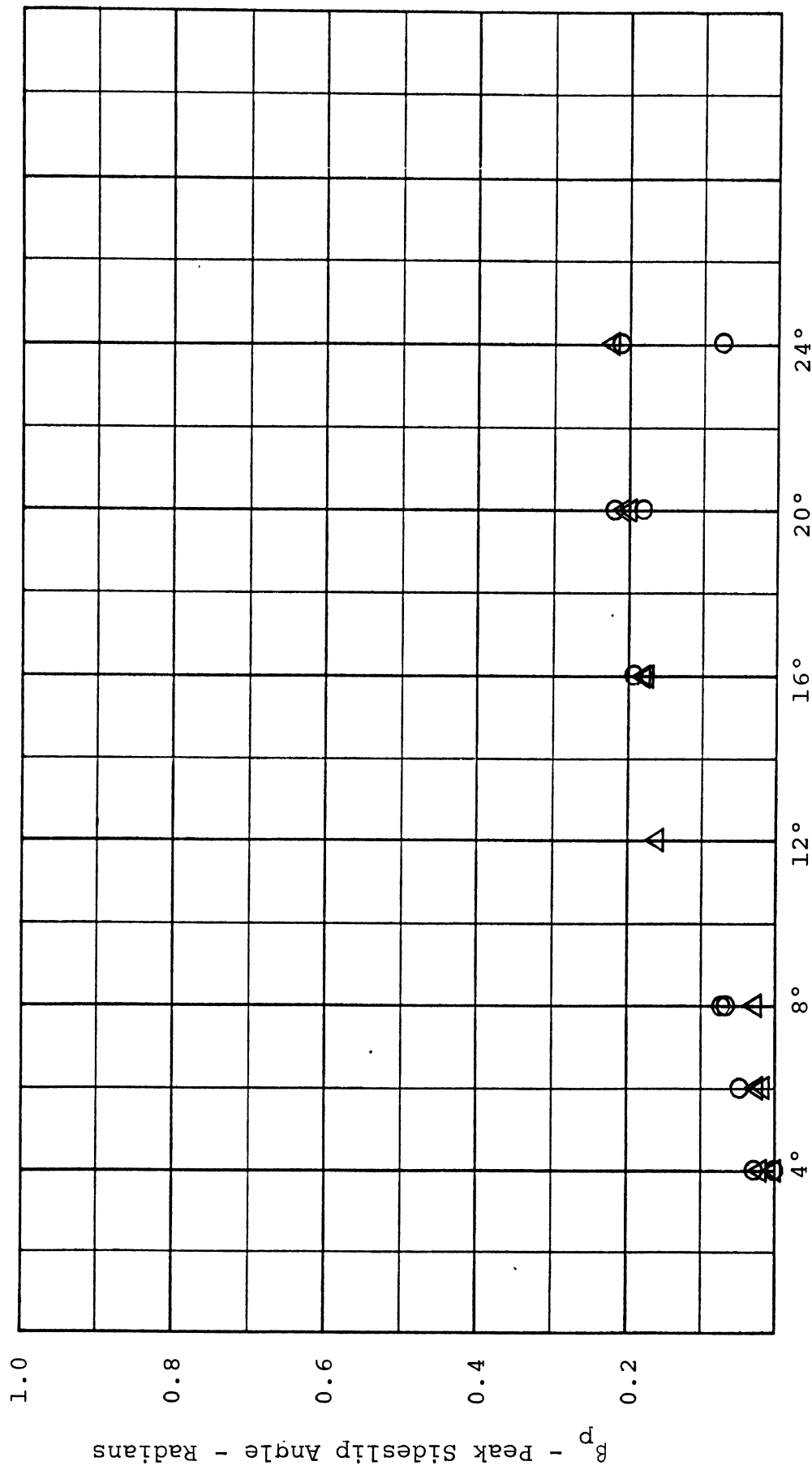


TRAPEZOIDAL STEER - AMBASSADOR



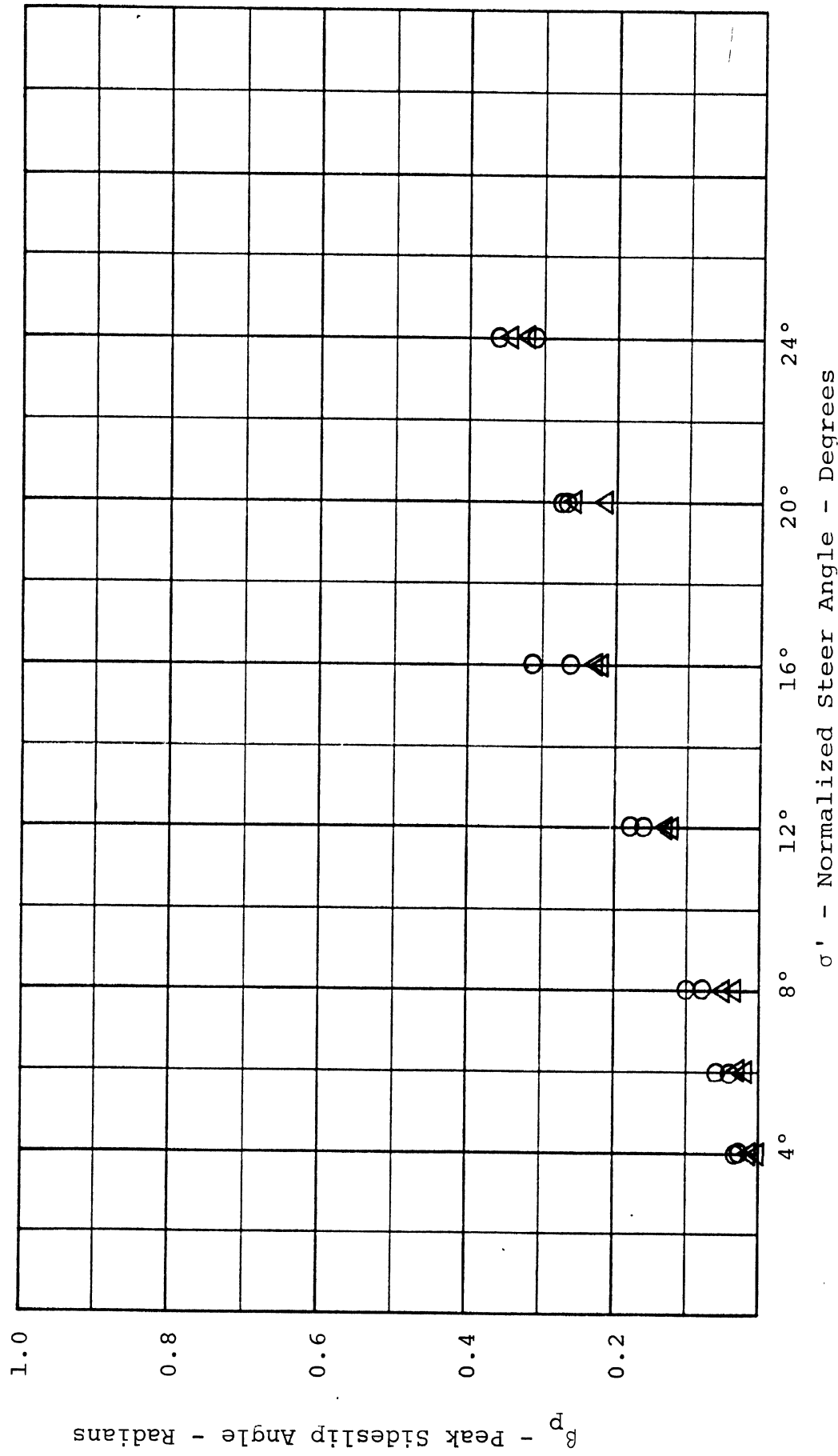
σ' - Normalized Steer Angle - Degrees

TRAPEZOIDAL STEER - AUSTIN

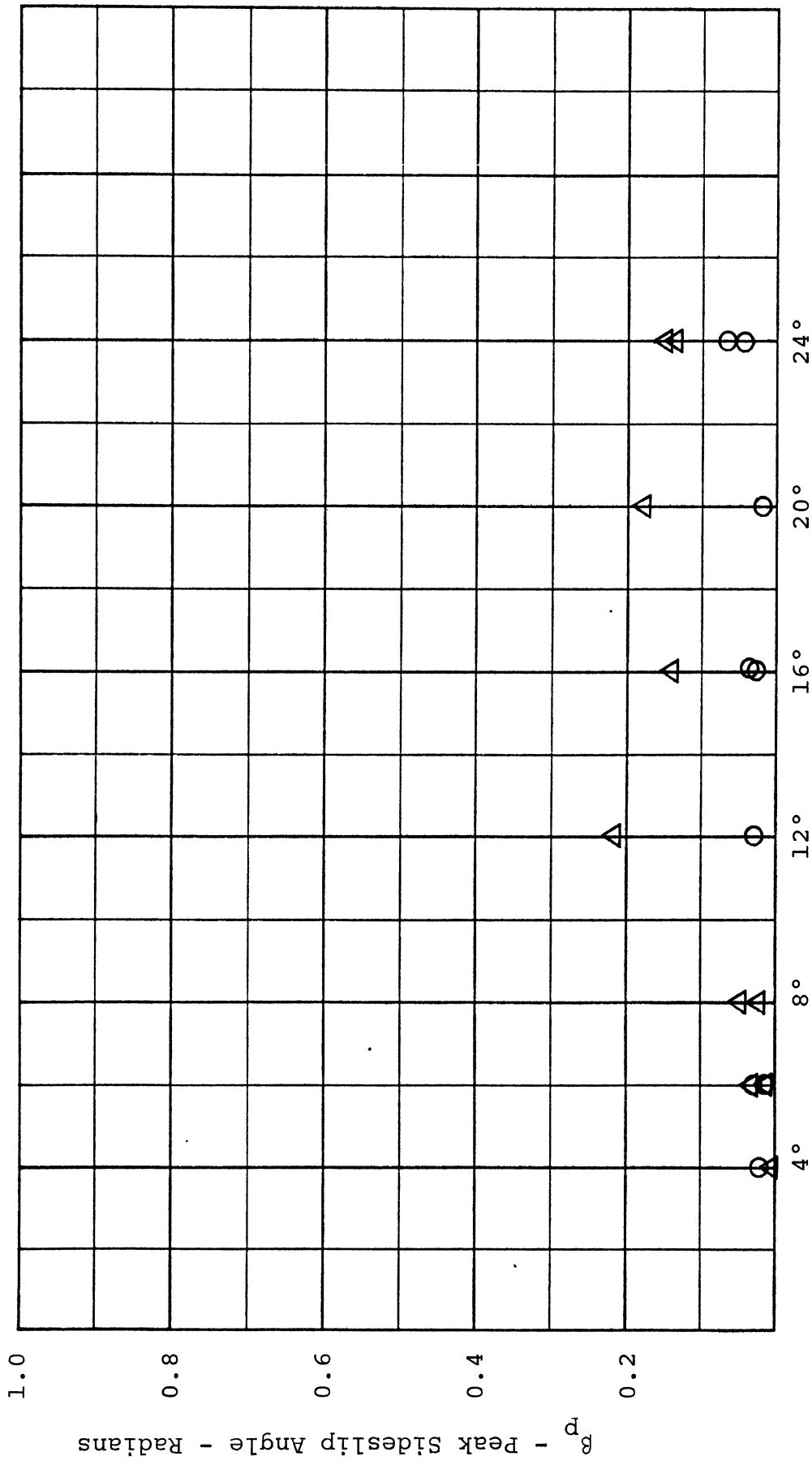


σ' - Normalized Steer Angle - Degrees

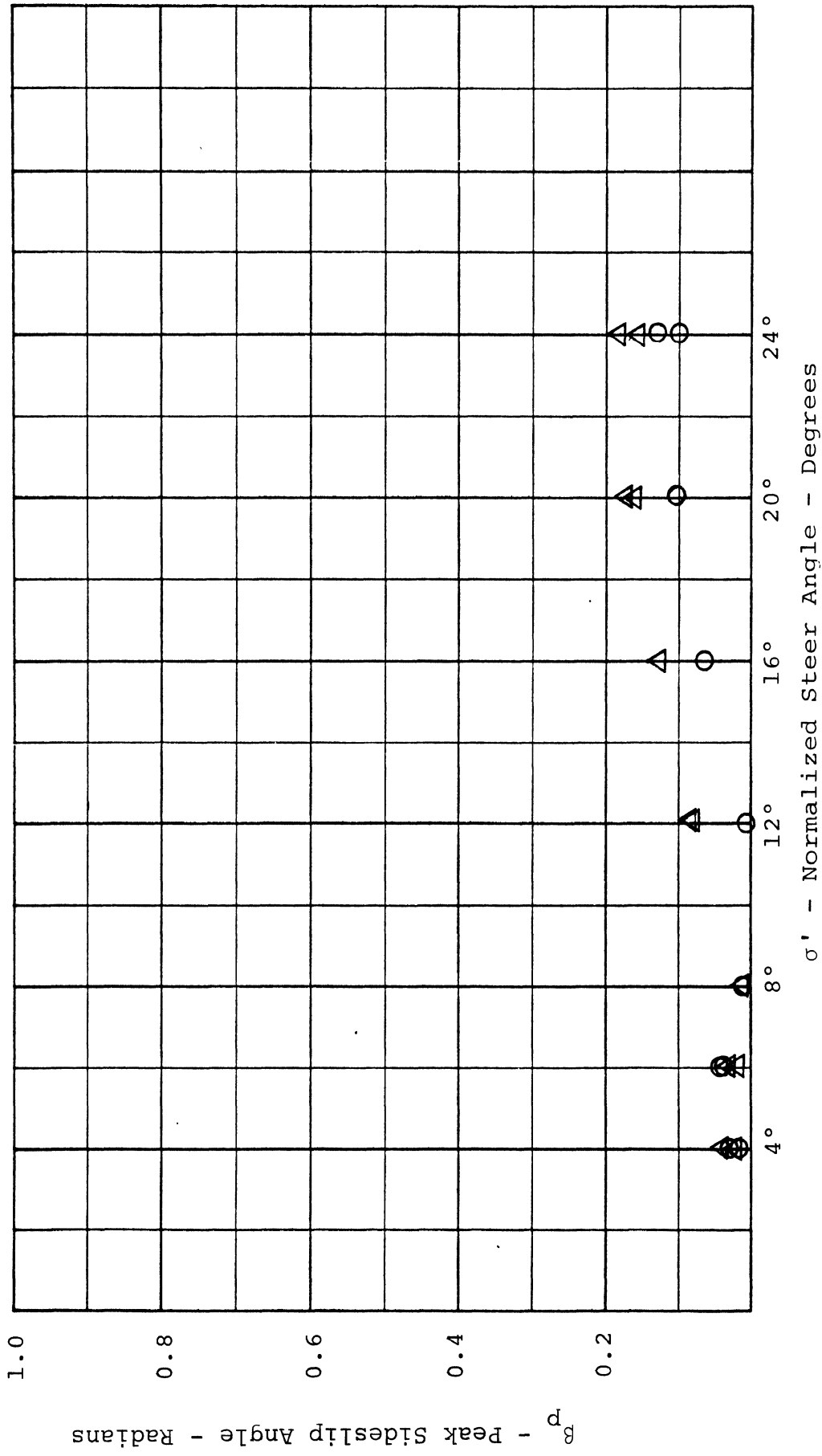
TRAPEZOIDAL STEER - BROOKWOOD



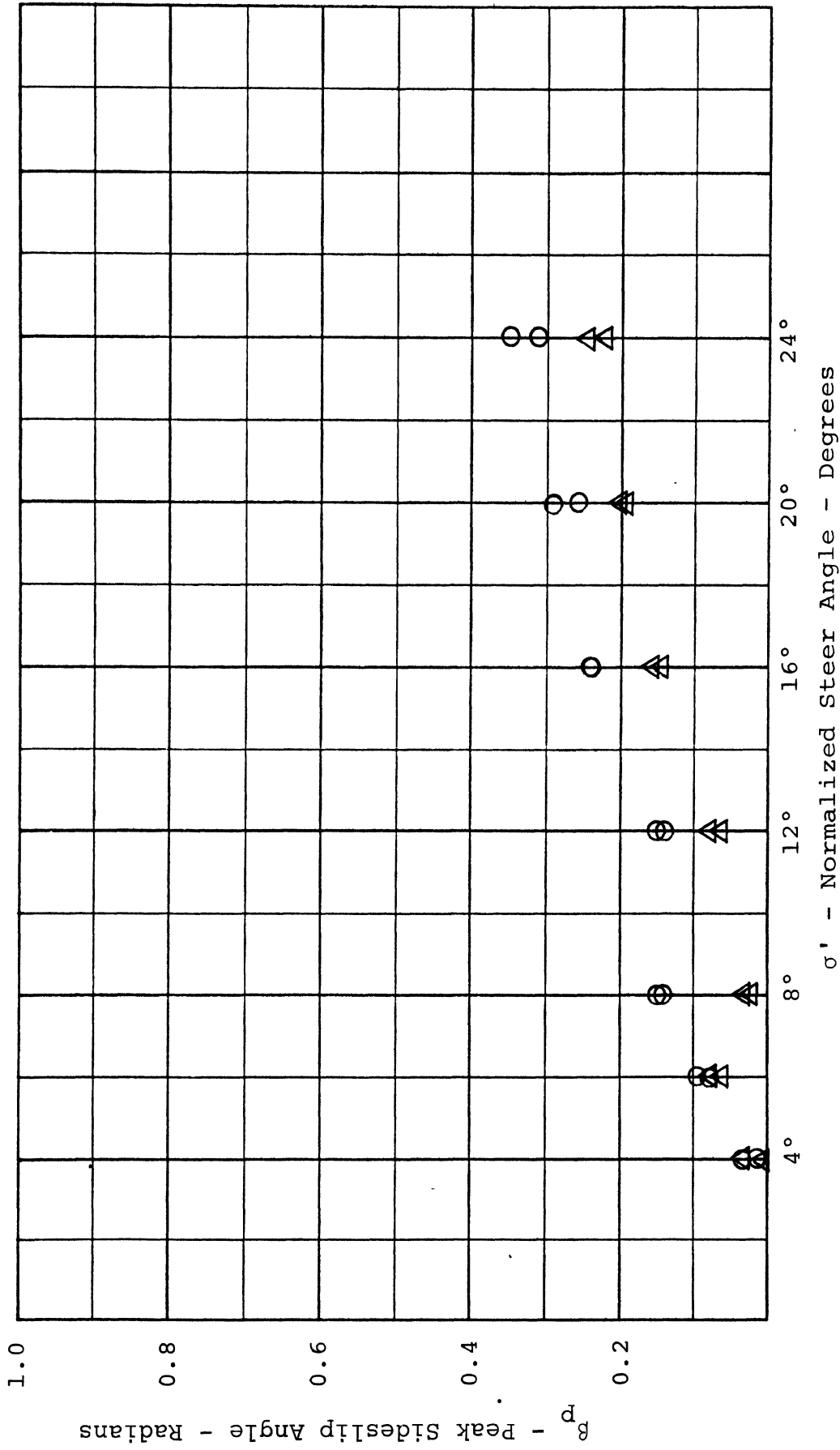
TRAPEZOIDAL STEER - DODGE



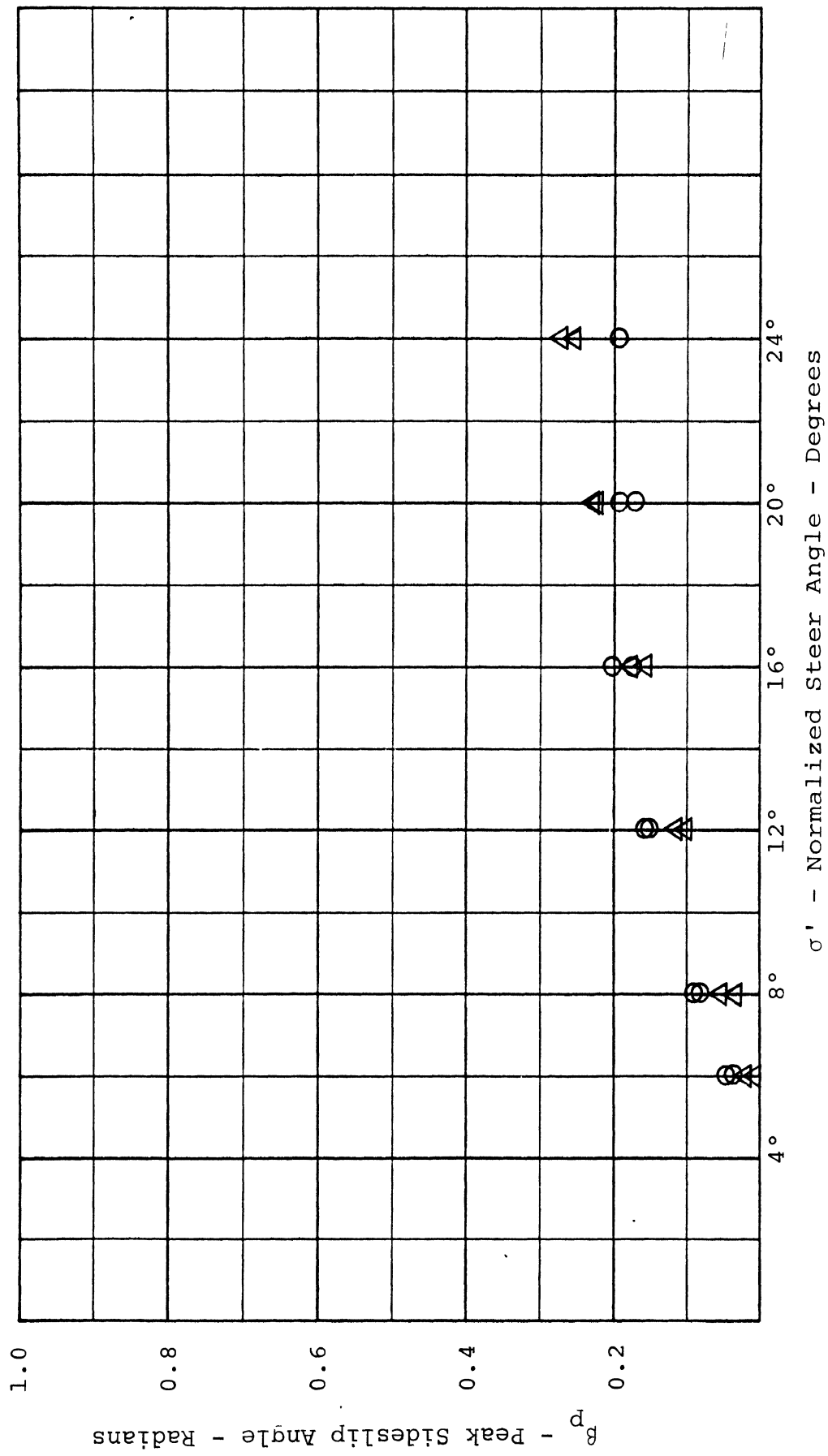
TRAPEZOIDAL STEER - FIREBIRD



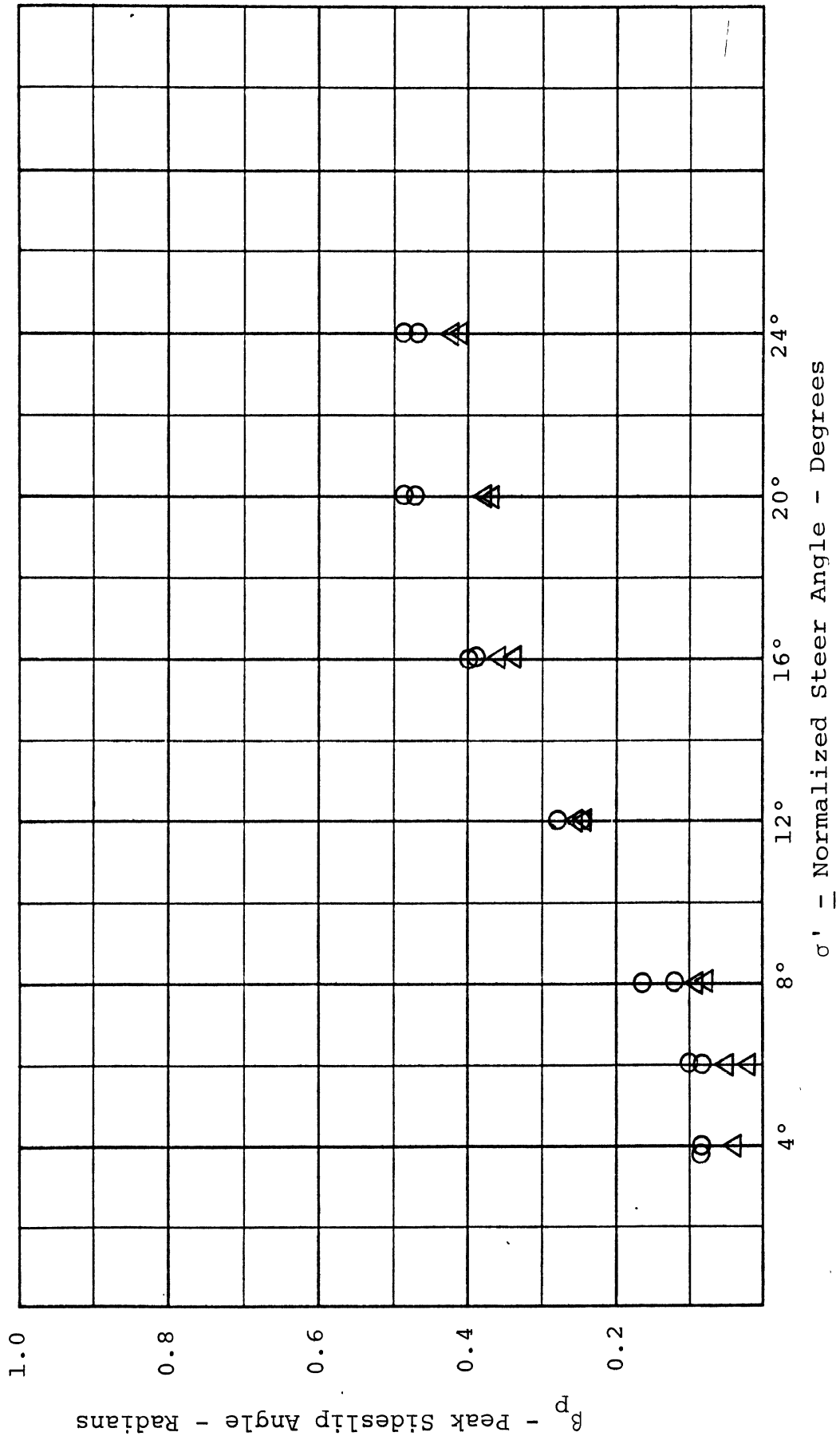
TRAPEZOIDAL STEER - GALAXIE



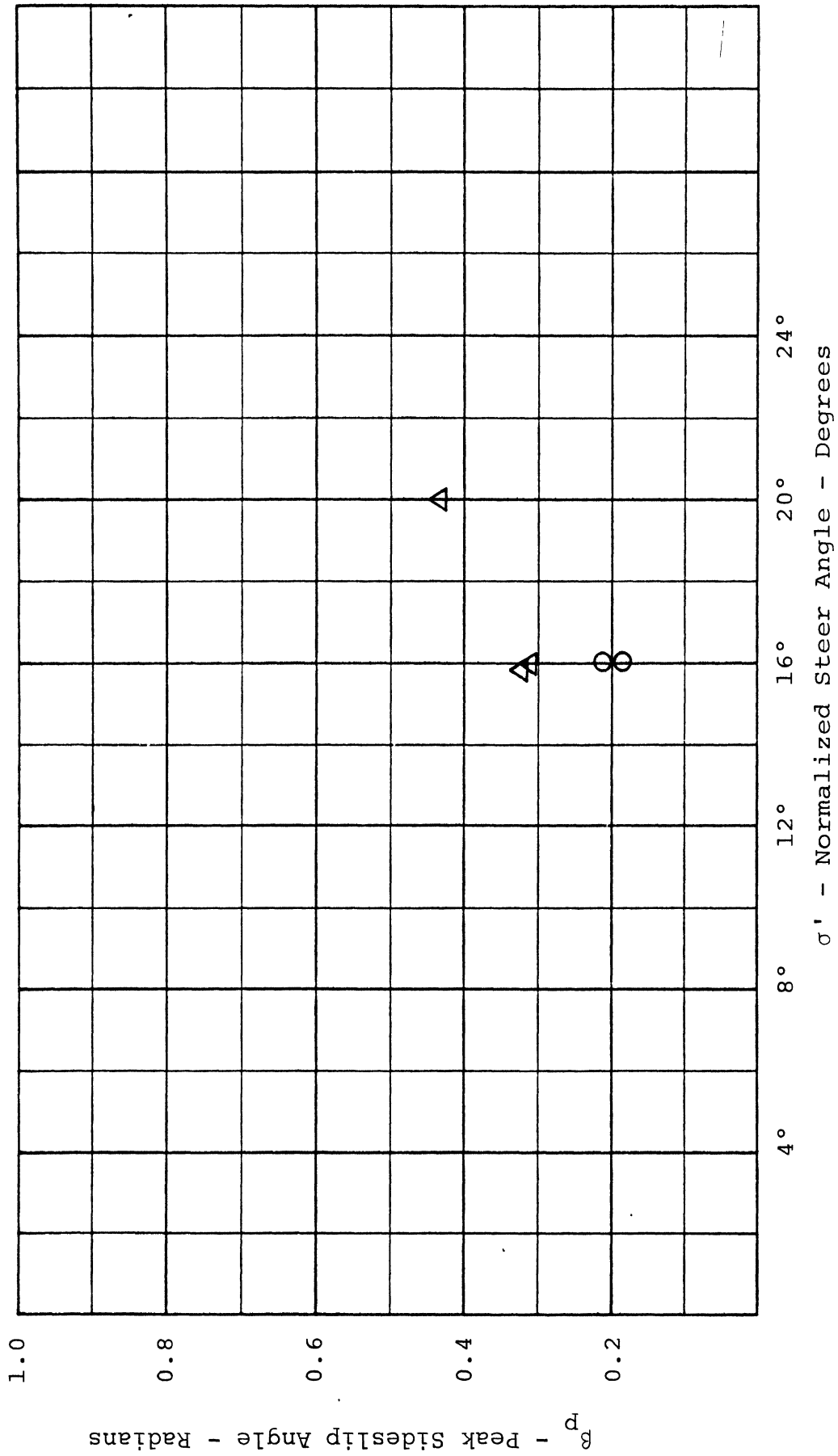
TRAPEZOIDAL STEER - GREMLIN



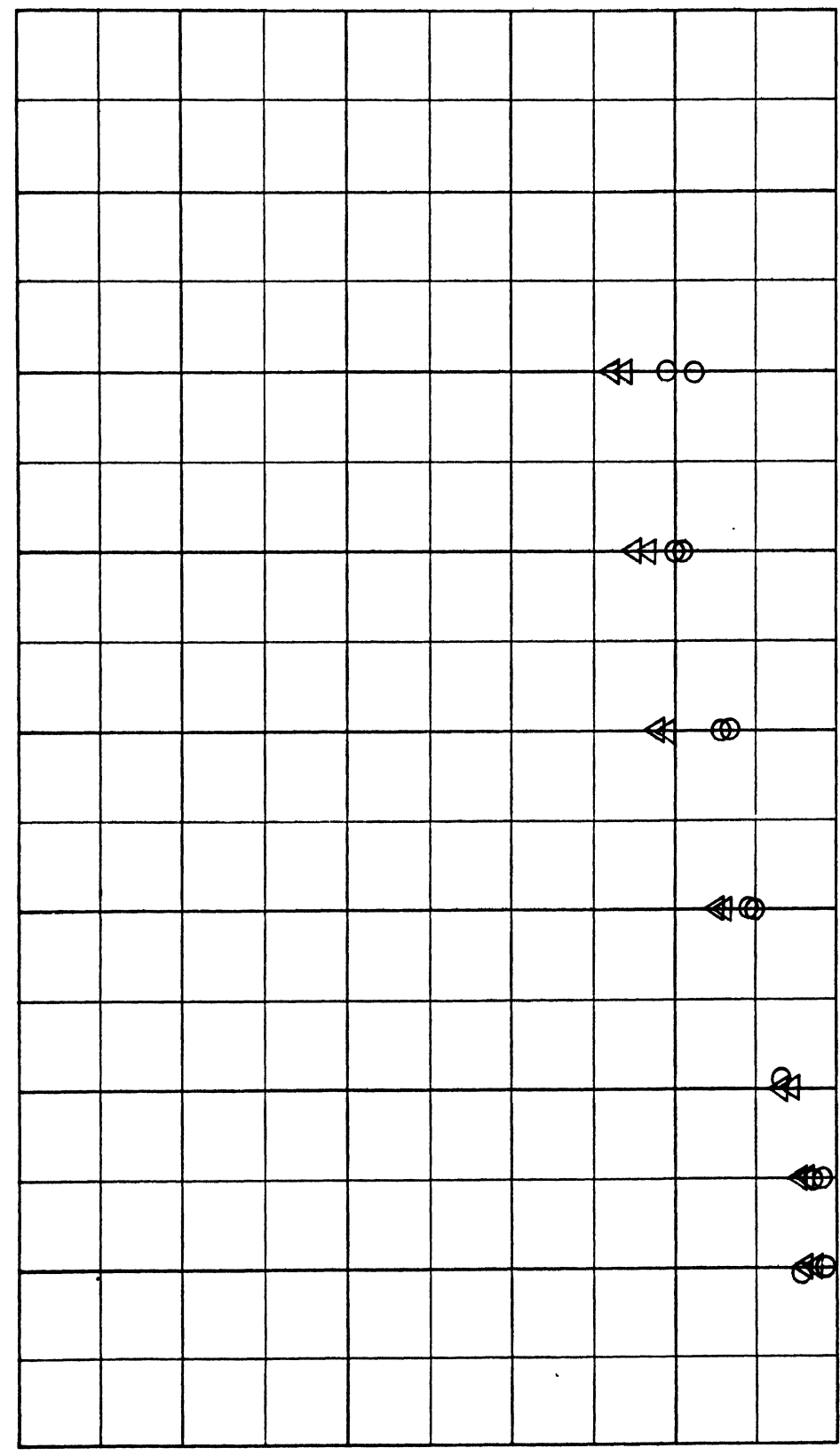
TRAPEZOIDAL STEER - IMPERIAL



TRAPEZOIDAL STEER - LOTUS

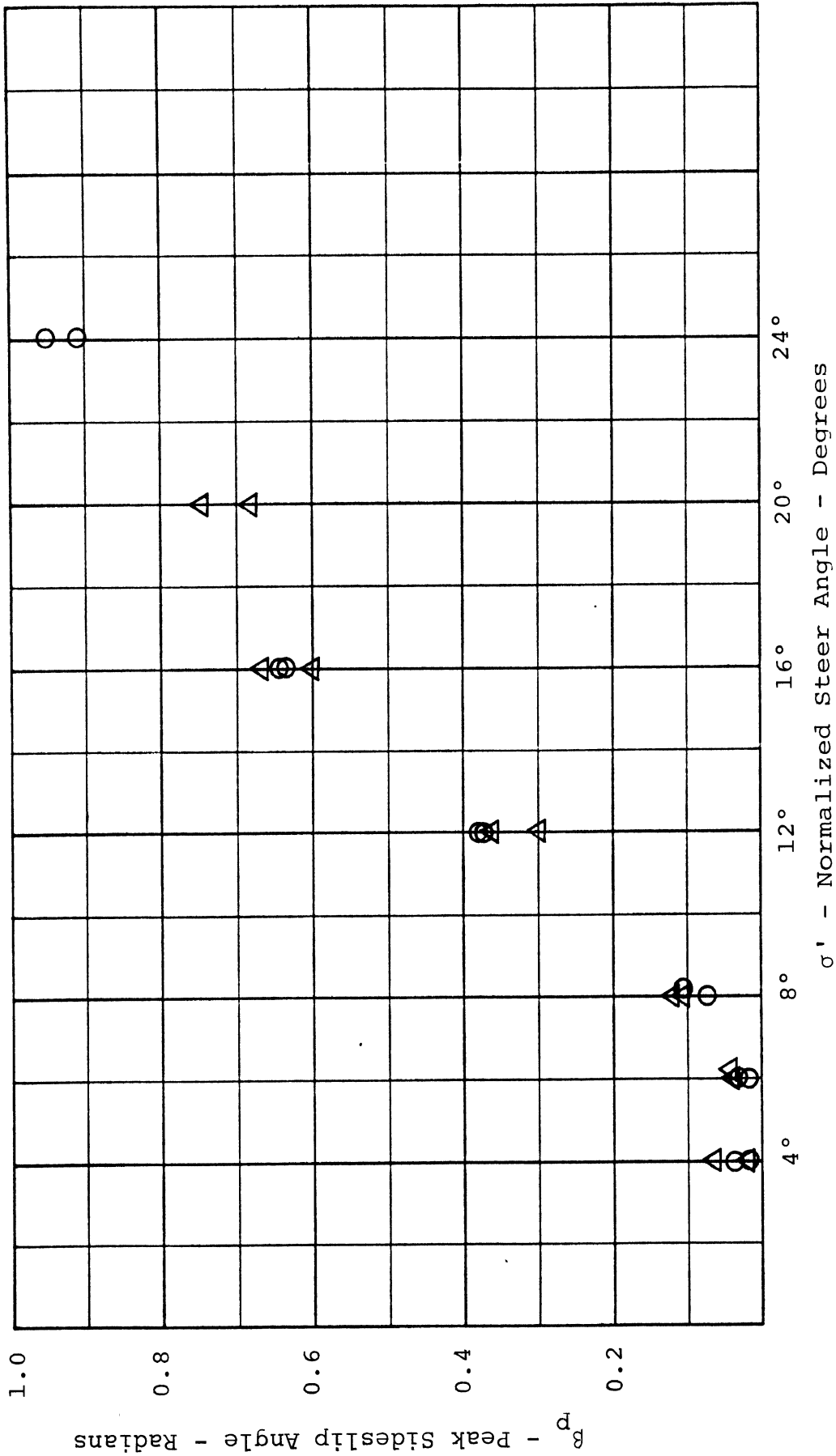


TRAPEZOIDAL STEER - MERCEDES

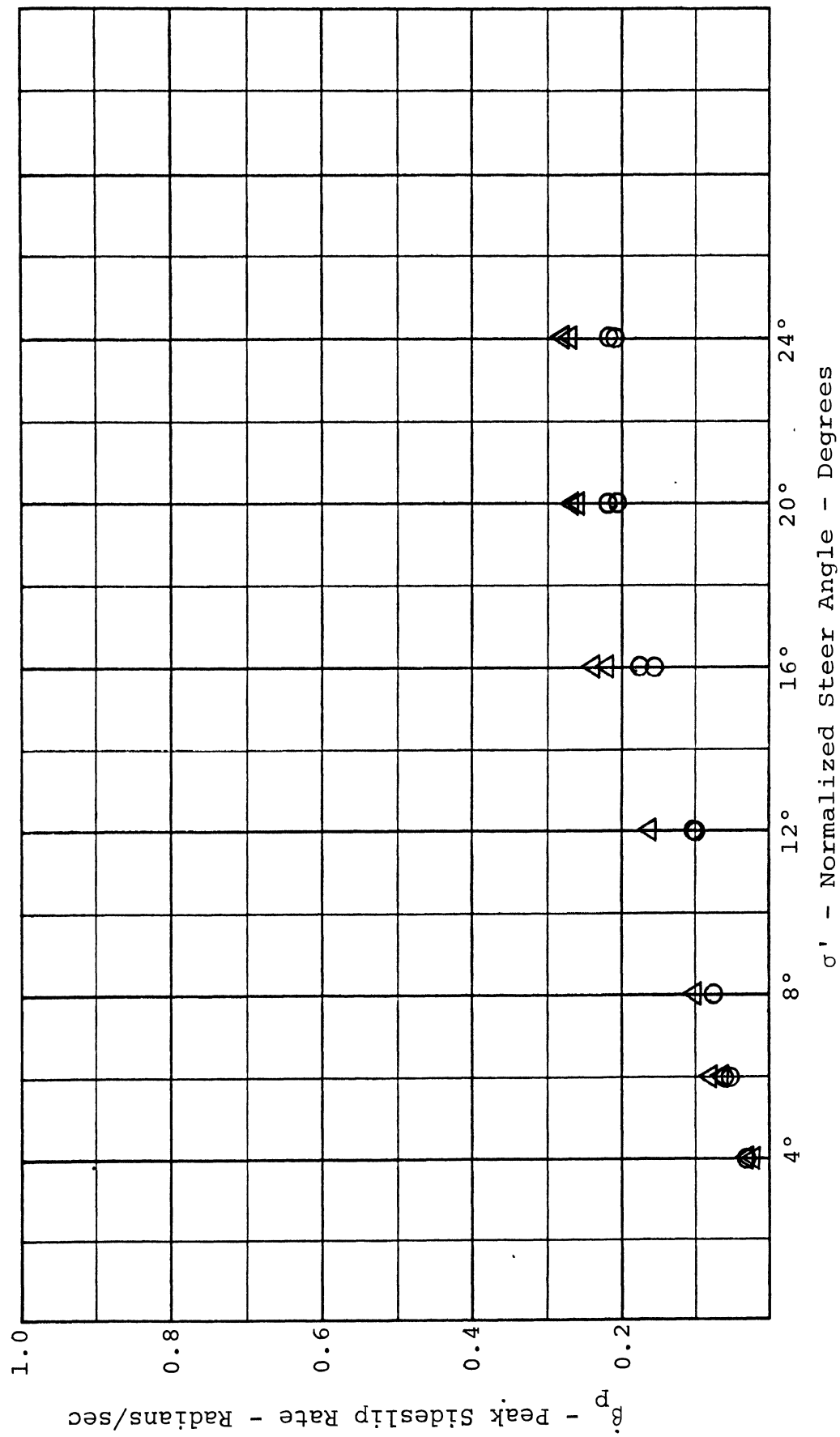


σ' - Normalized Steer Angle - Degrees

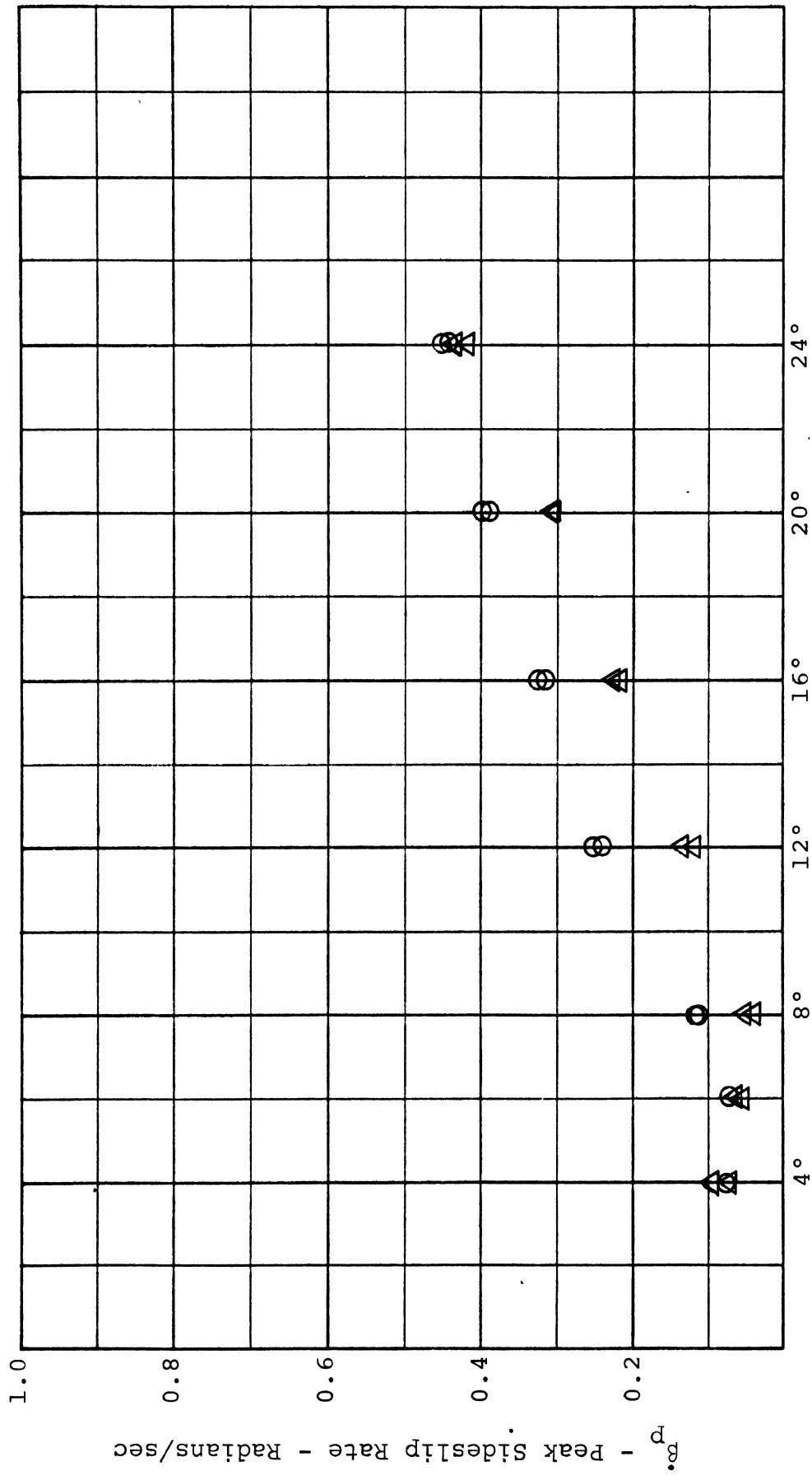
TRAPEZOIDAL STEER - TORONADO



TRAPEZOIDAL STEER - VW

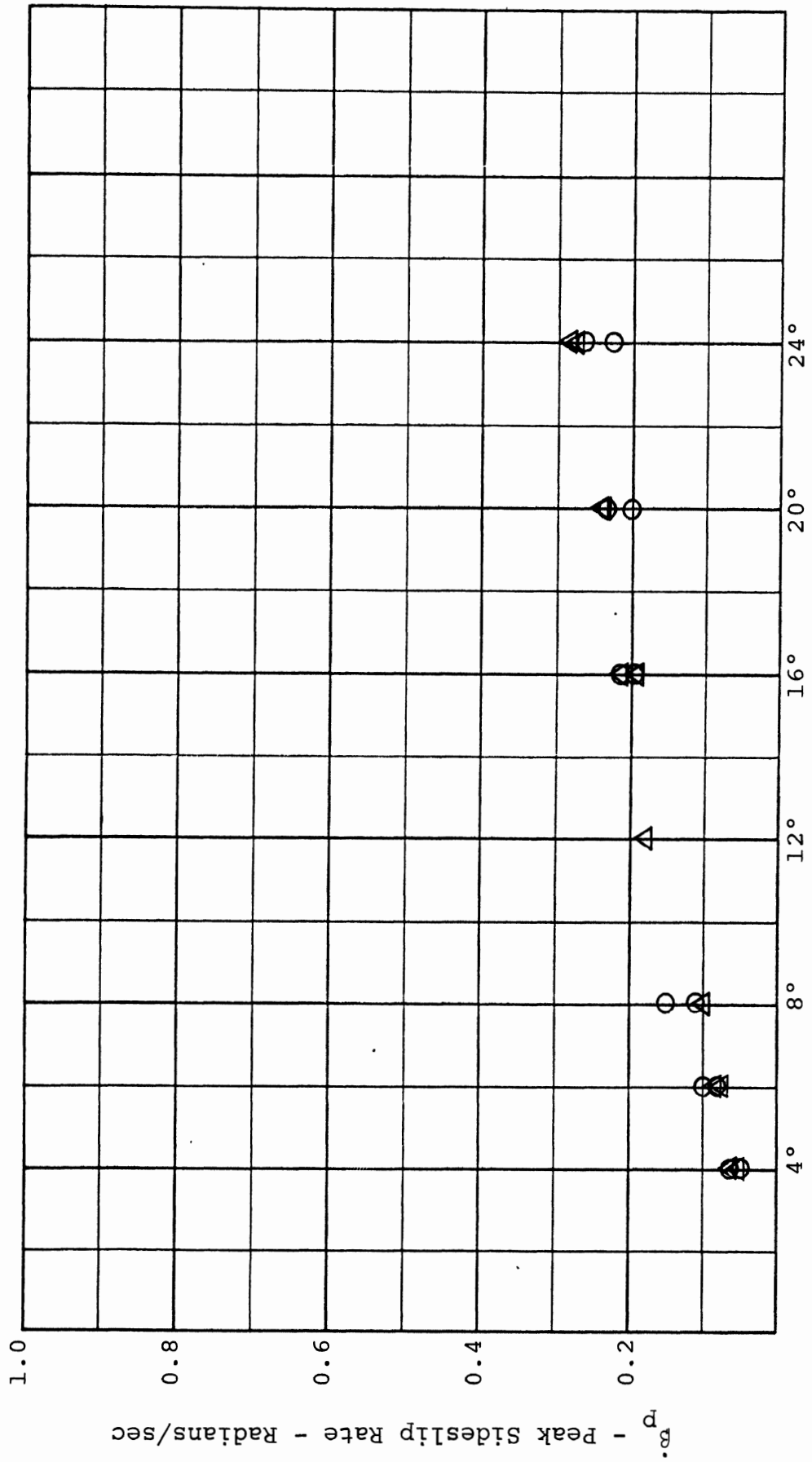


TRAPEZOIDAL STEER - AMBASSADOR

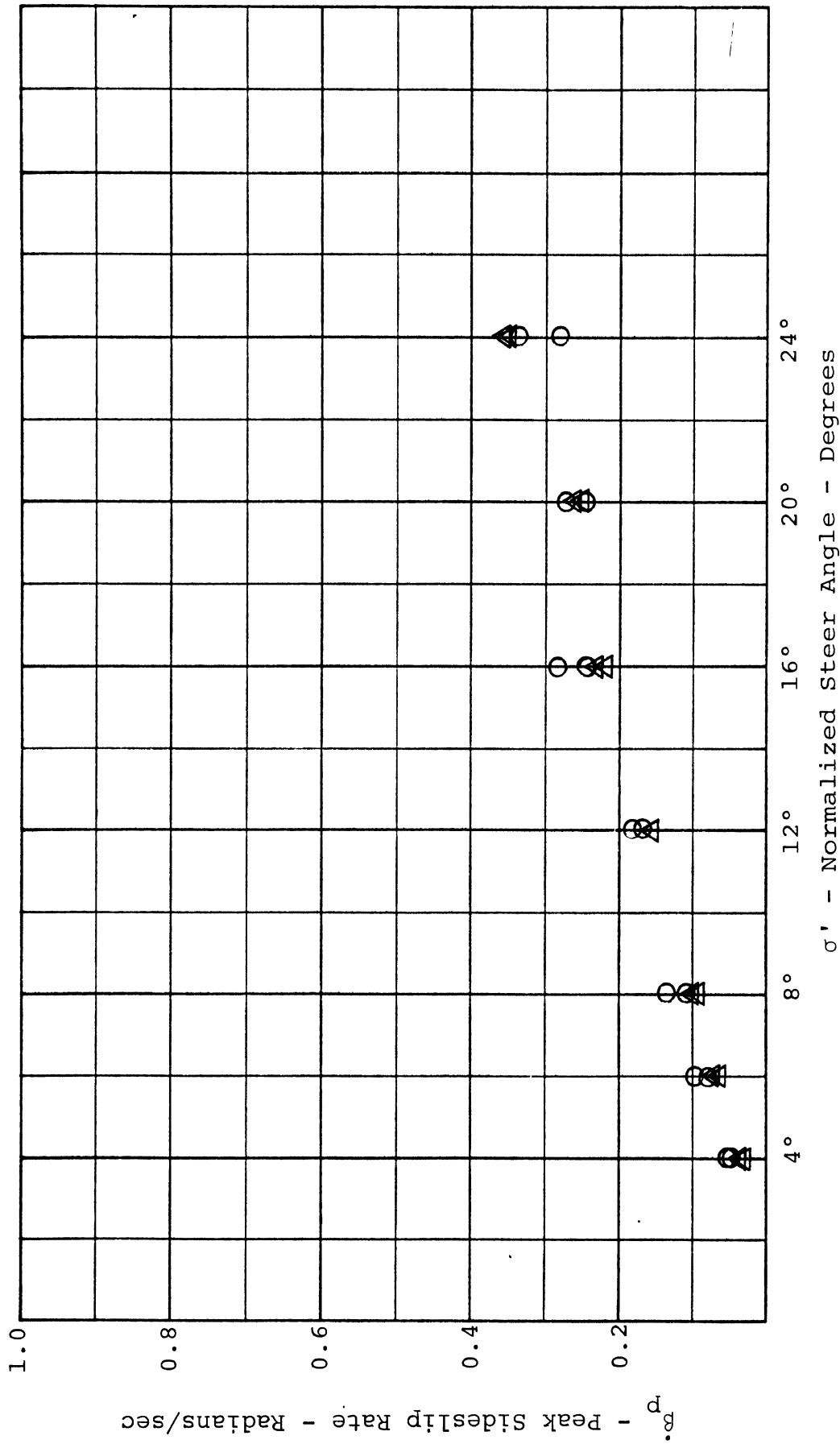


σ' - Normalized Steer Angle - Degrees

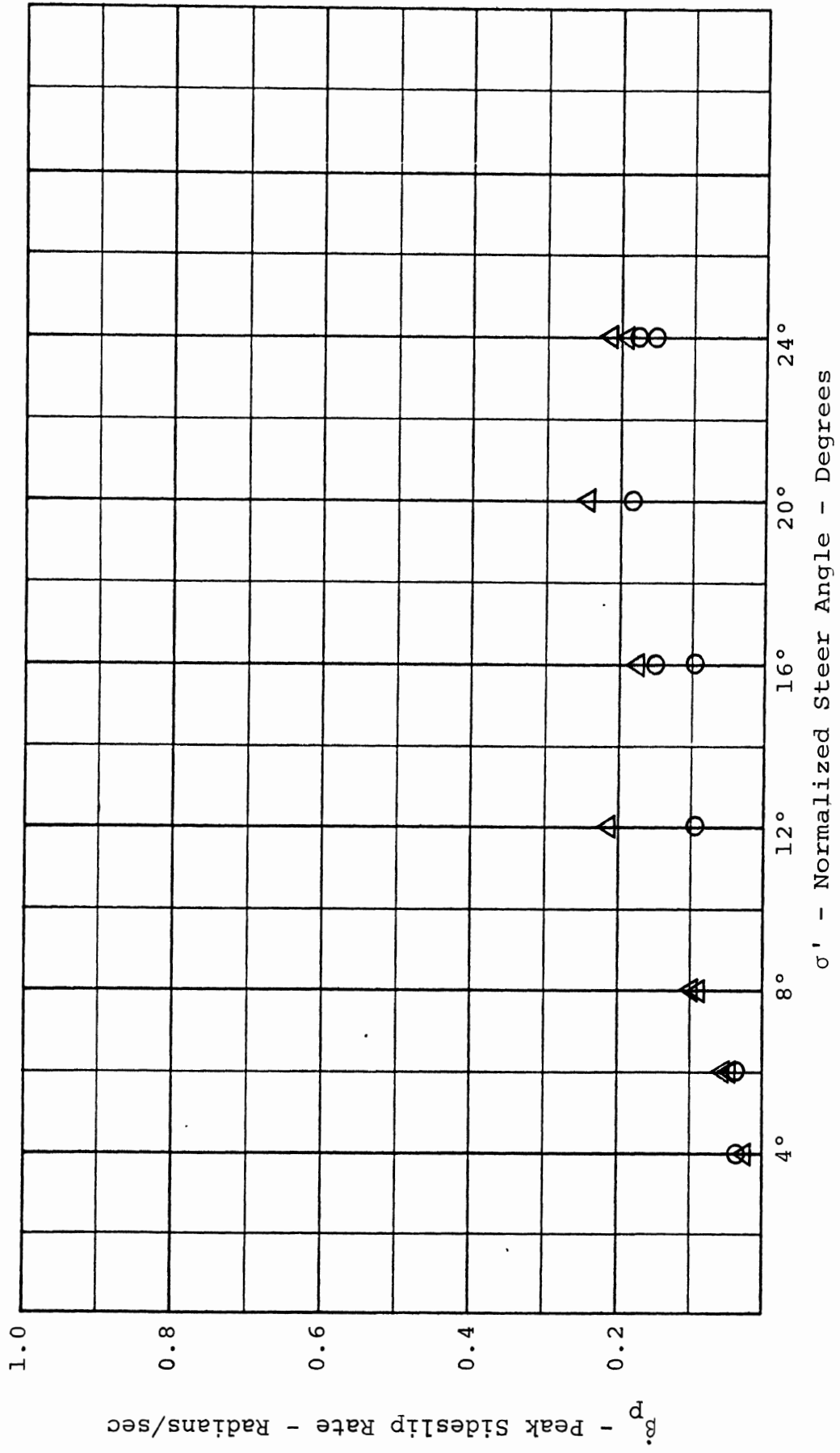
TRAPEZOIDAL STEER - AUSTIN



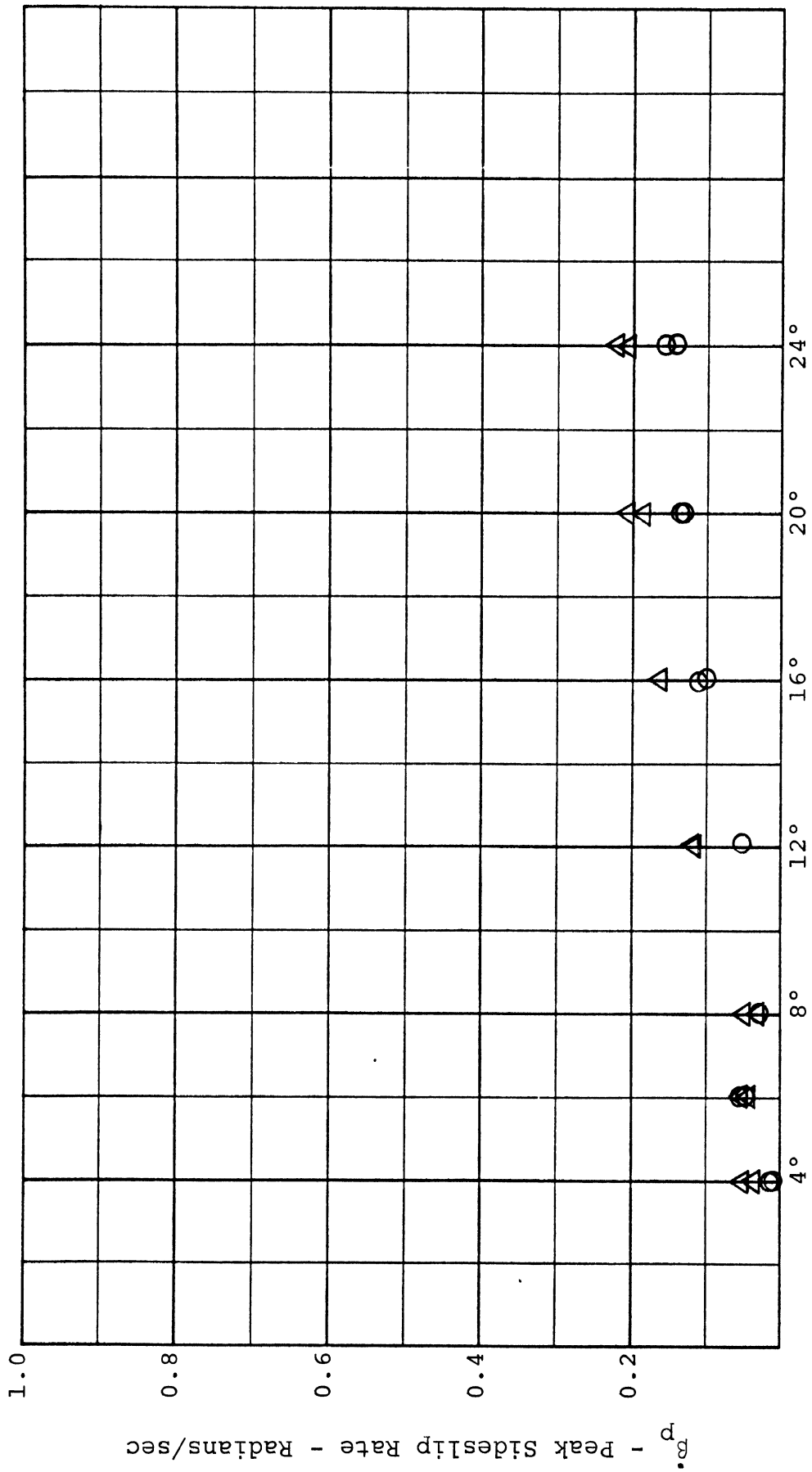
TRAPEZOIDAL STEER - BROOKWOOD



TRAPEZOIDAL STEER - DODGE

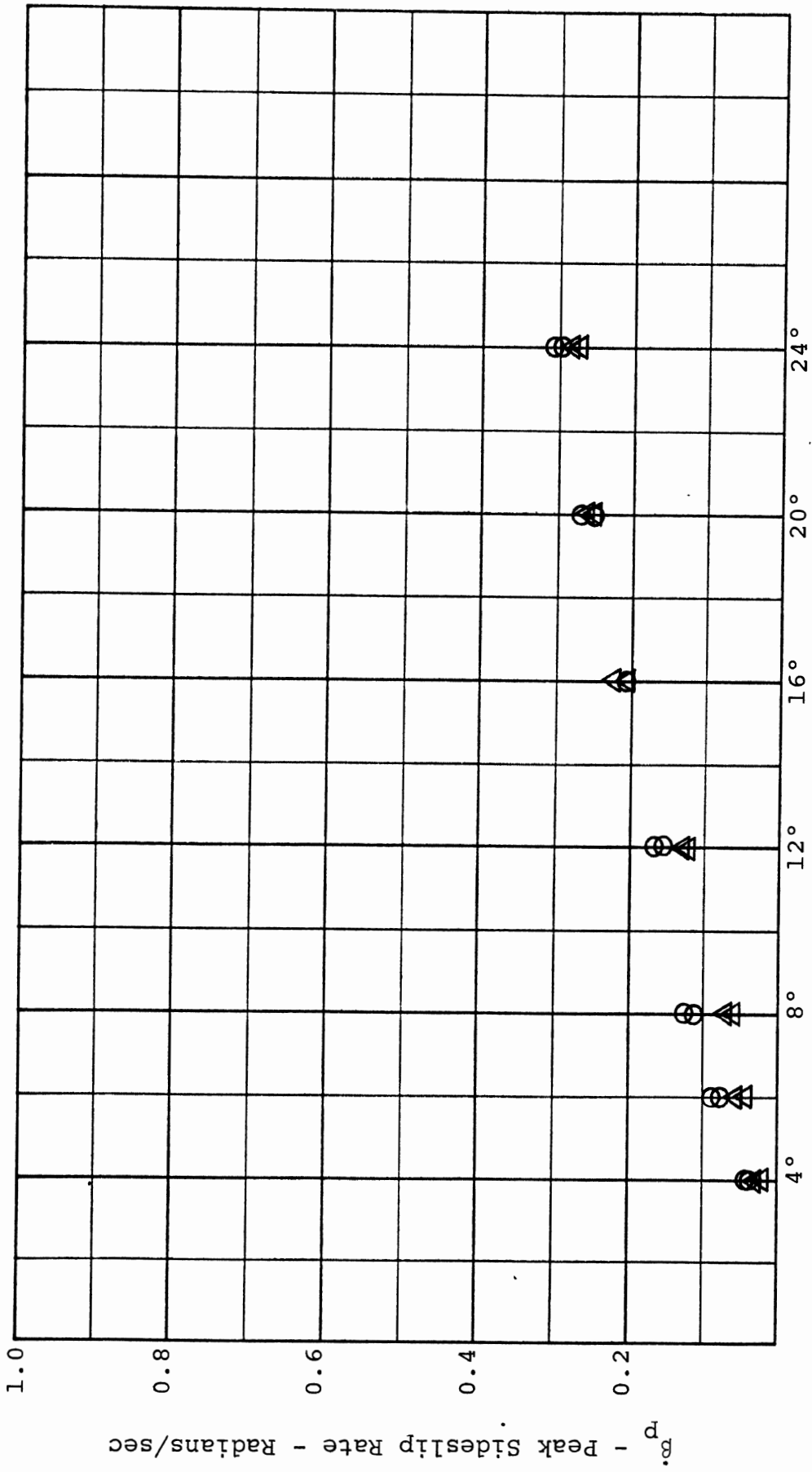


TRAPEZOIDAL STEER - FIREBIRD



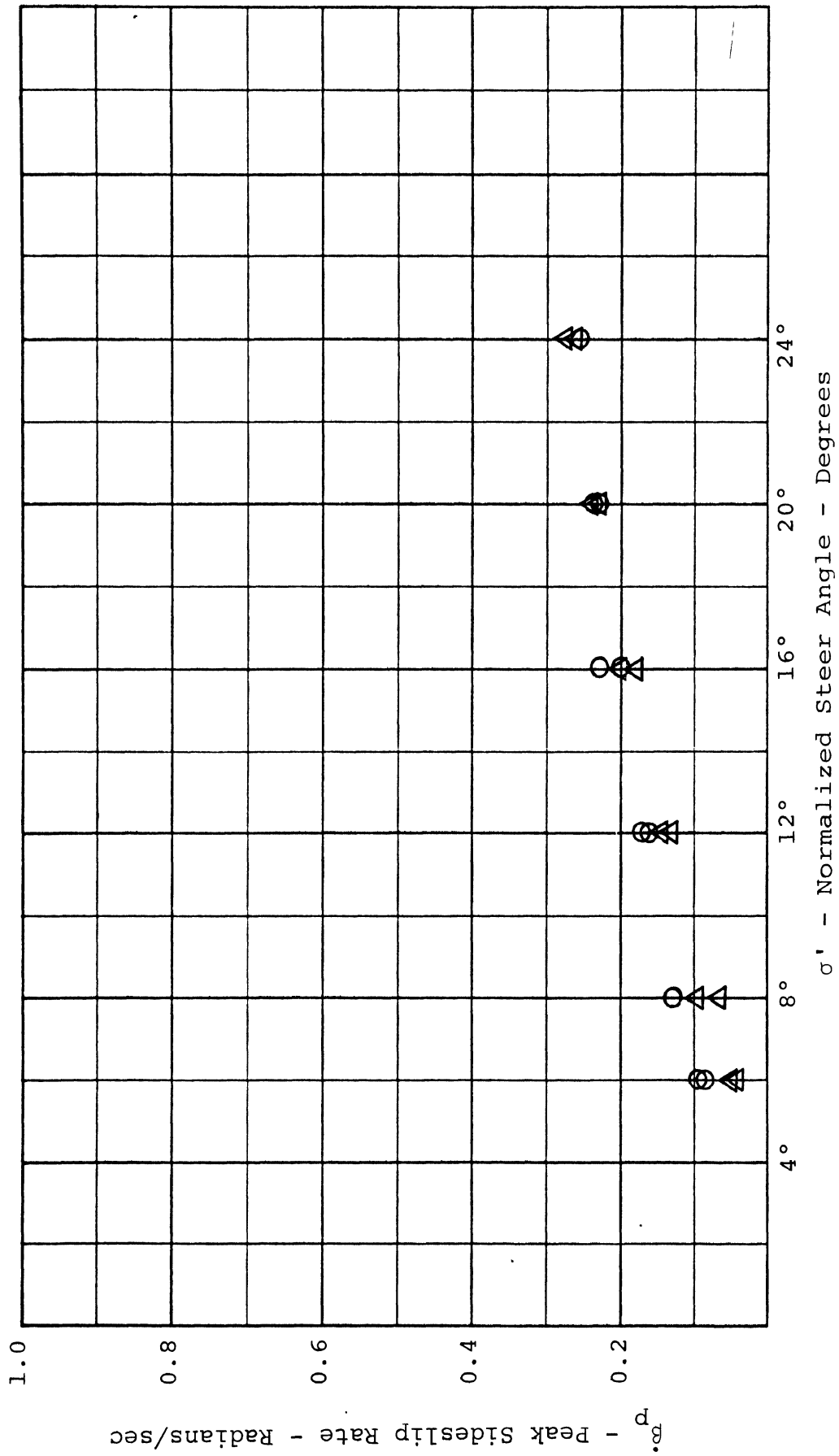
σ' - Normalized Steer Angle - Degrees

TRAPEZOIDAL STEER - GALAXIE

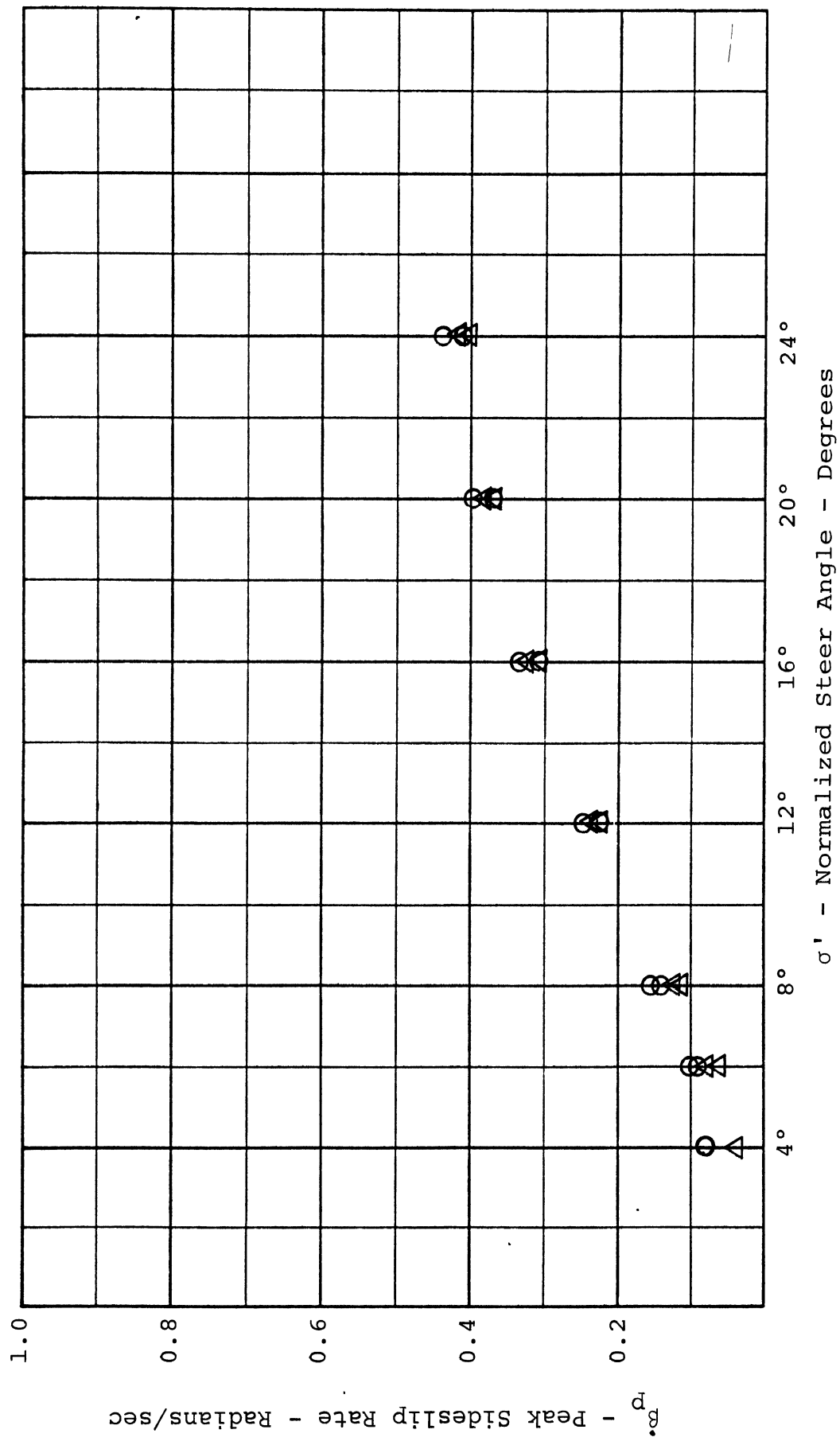


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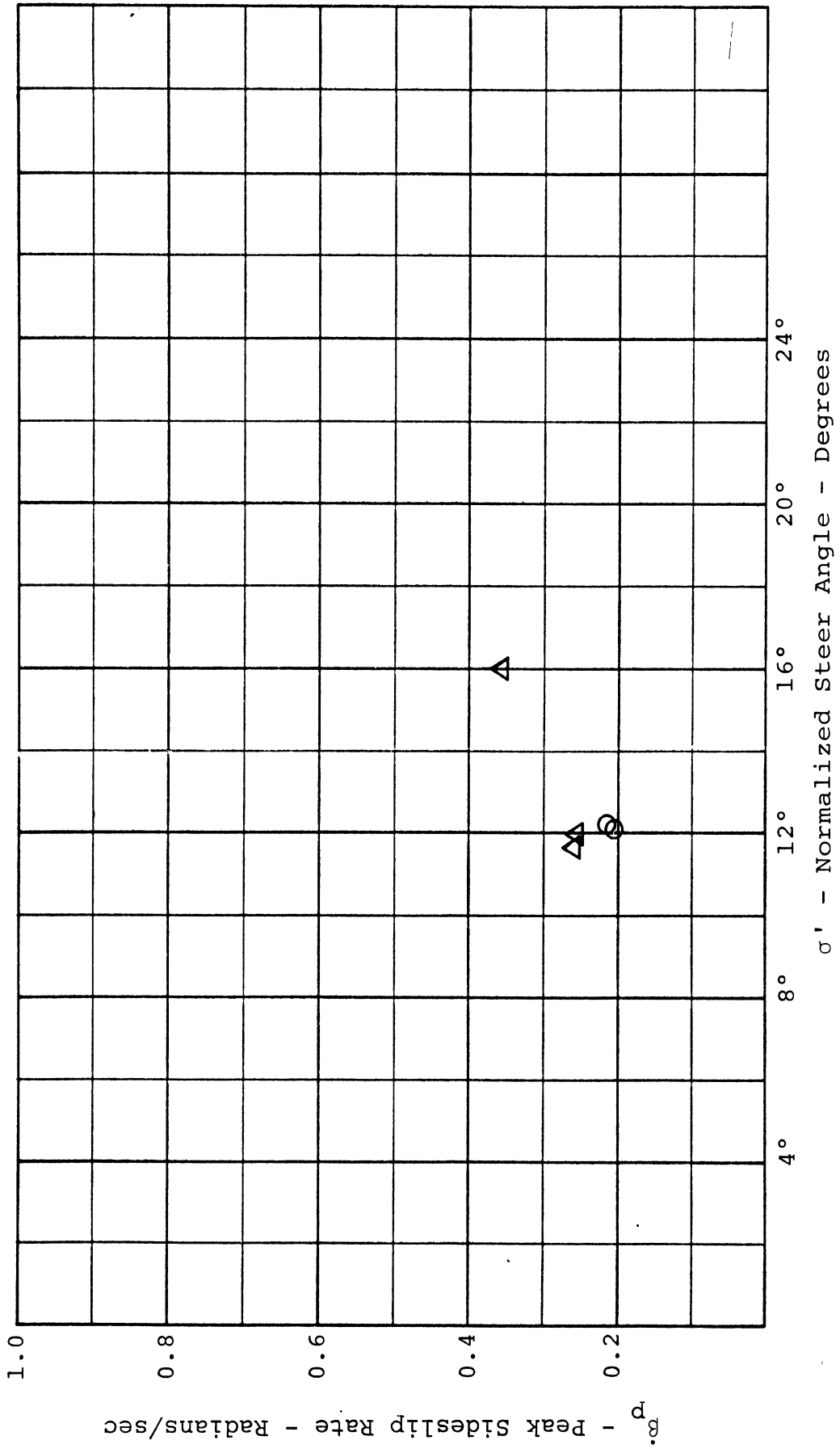
TRAPEZOIDAL STEER - GREMLIN



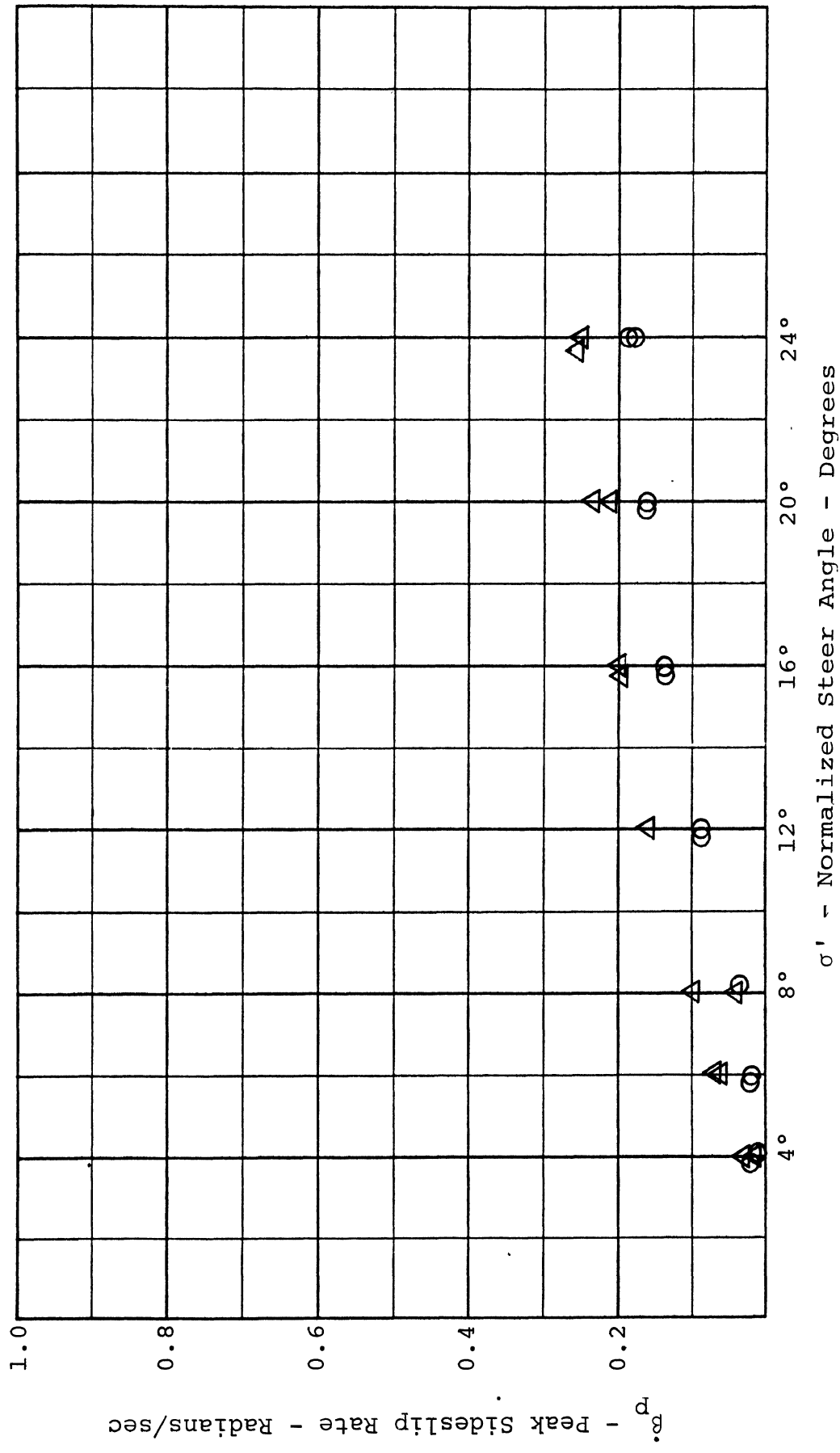
TRAPEZOIDAL STEER - IMPERIAL



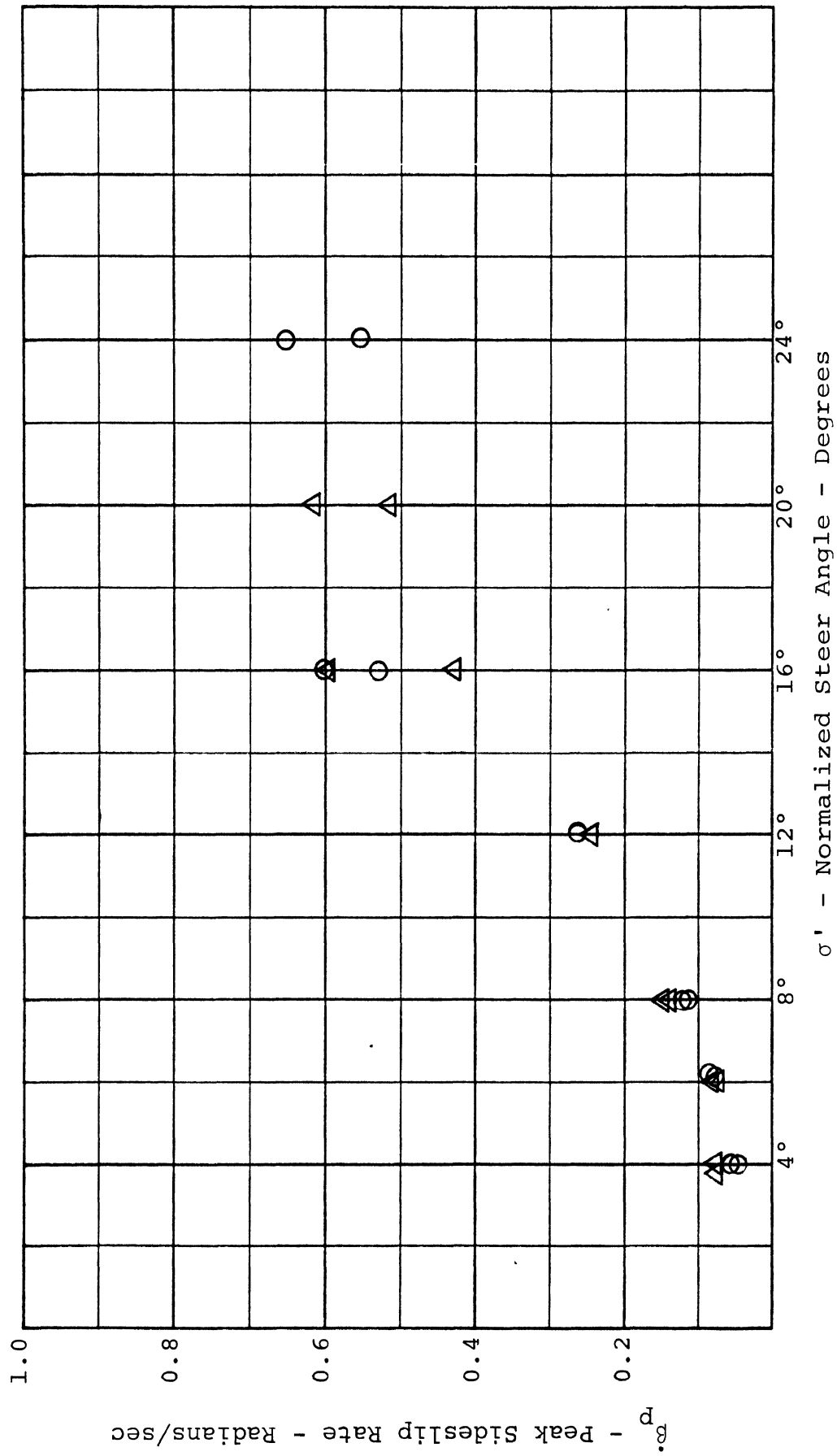
TRAPEZOIDAL STEER - LOTUS



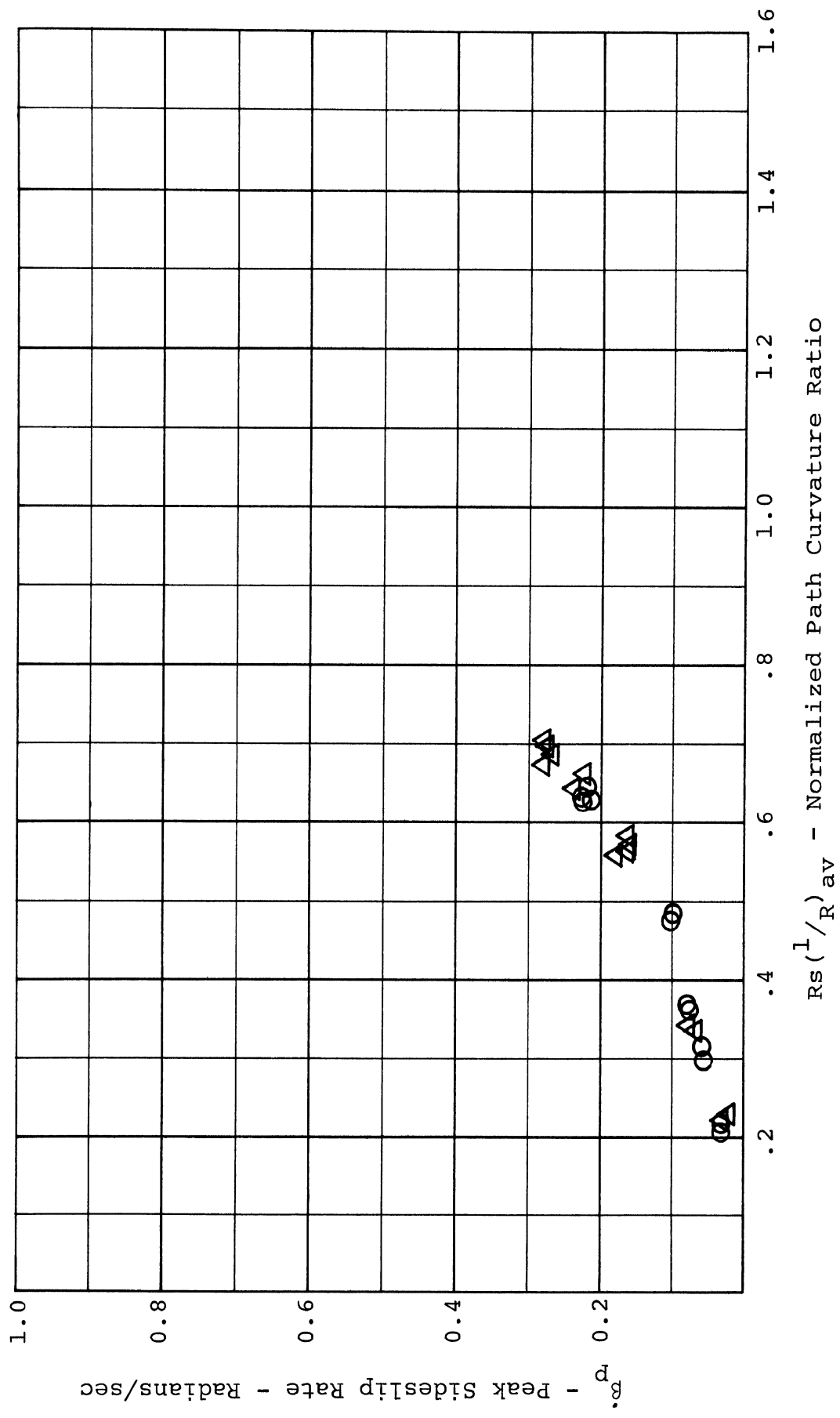
TRAPEZOIDAL STEER - MERCEDES



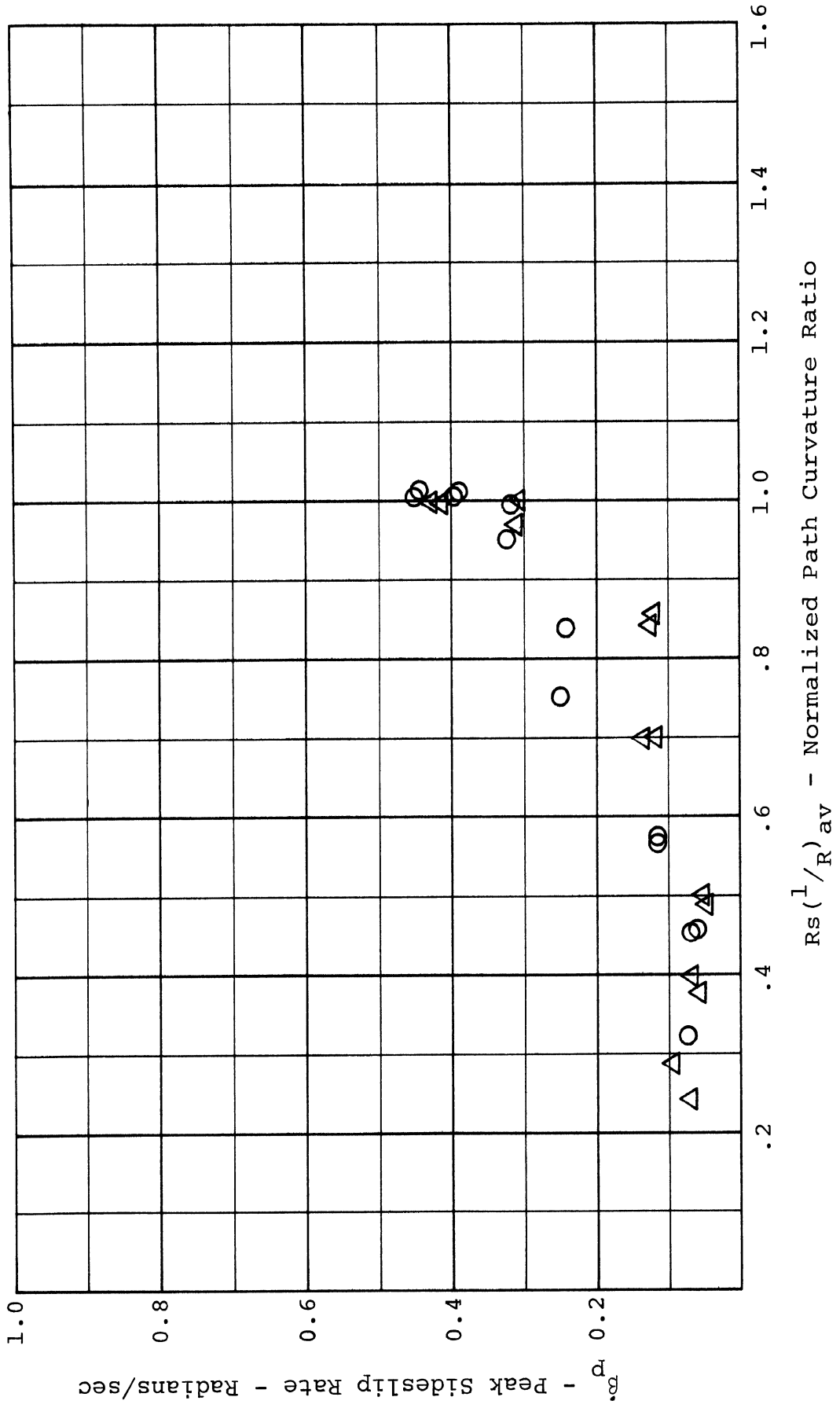
TRAPEZOIDAL STEER - TORONADO

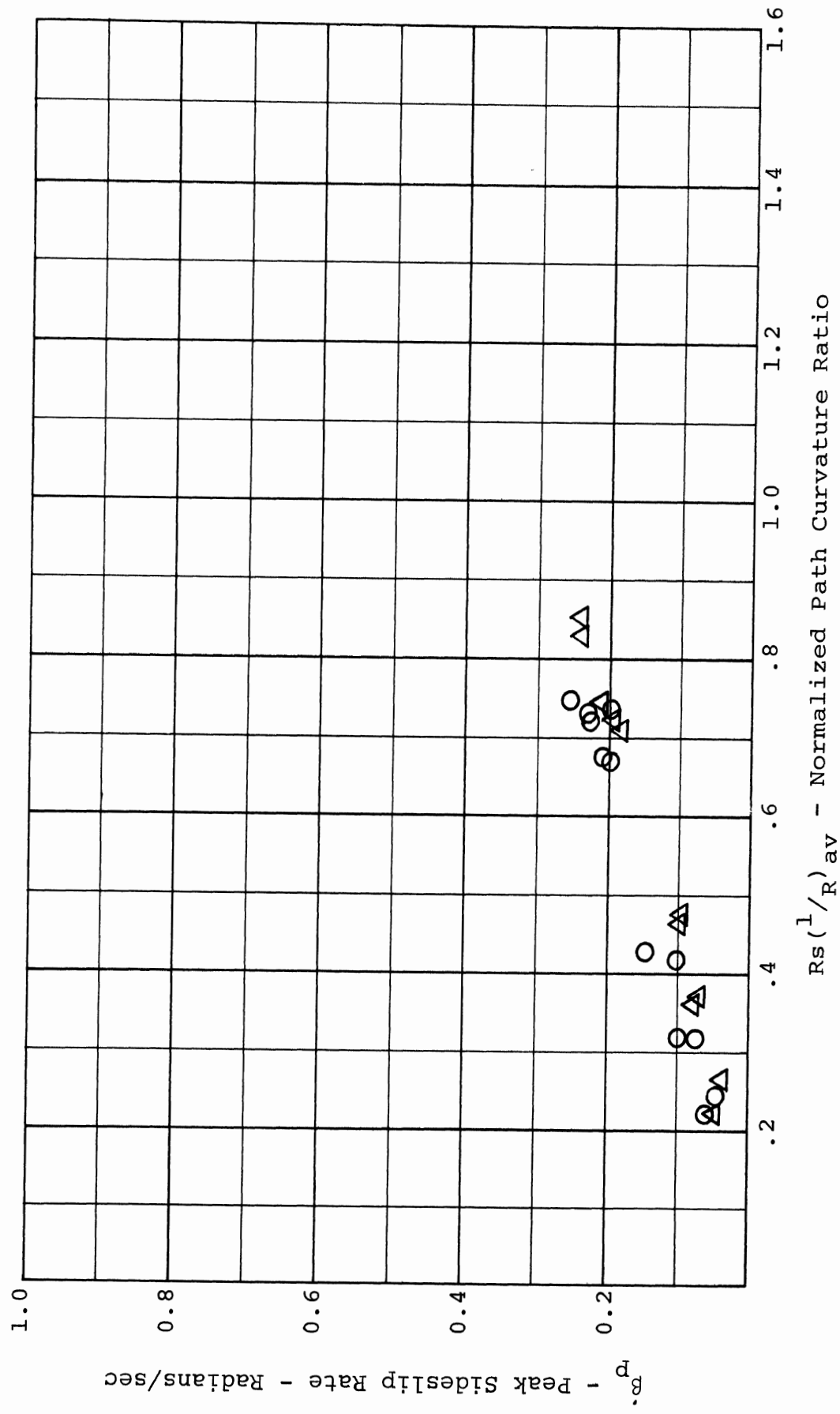


TRAPEZOIDAL STEER - VW

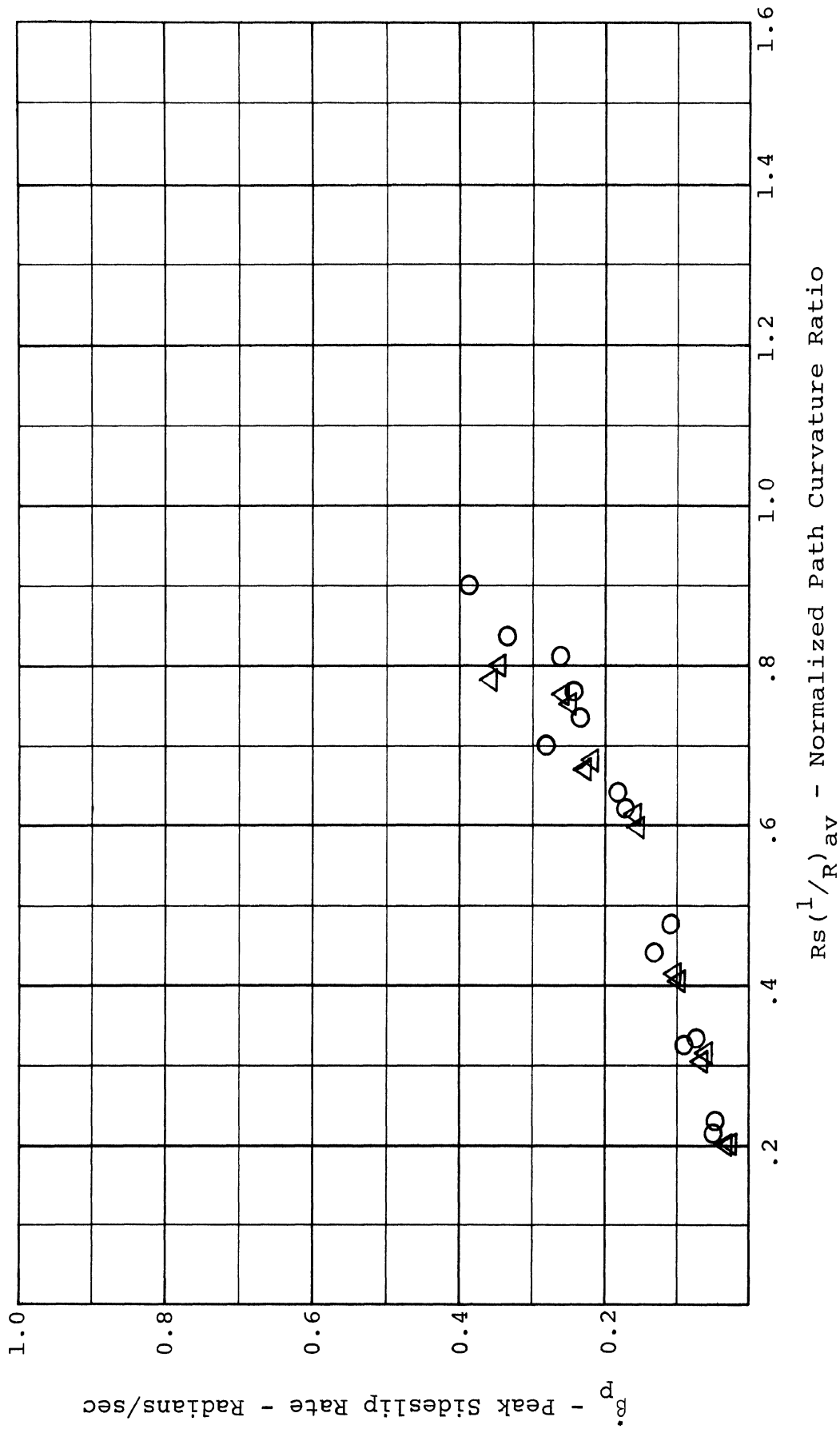


TRAPEZOIDAL STEER - AMBASSADOR

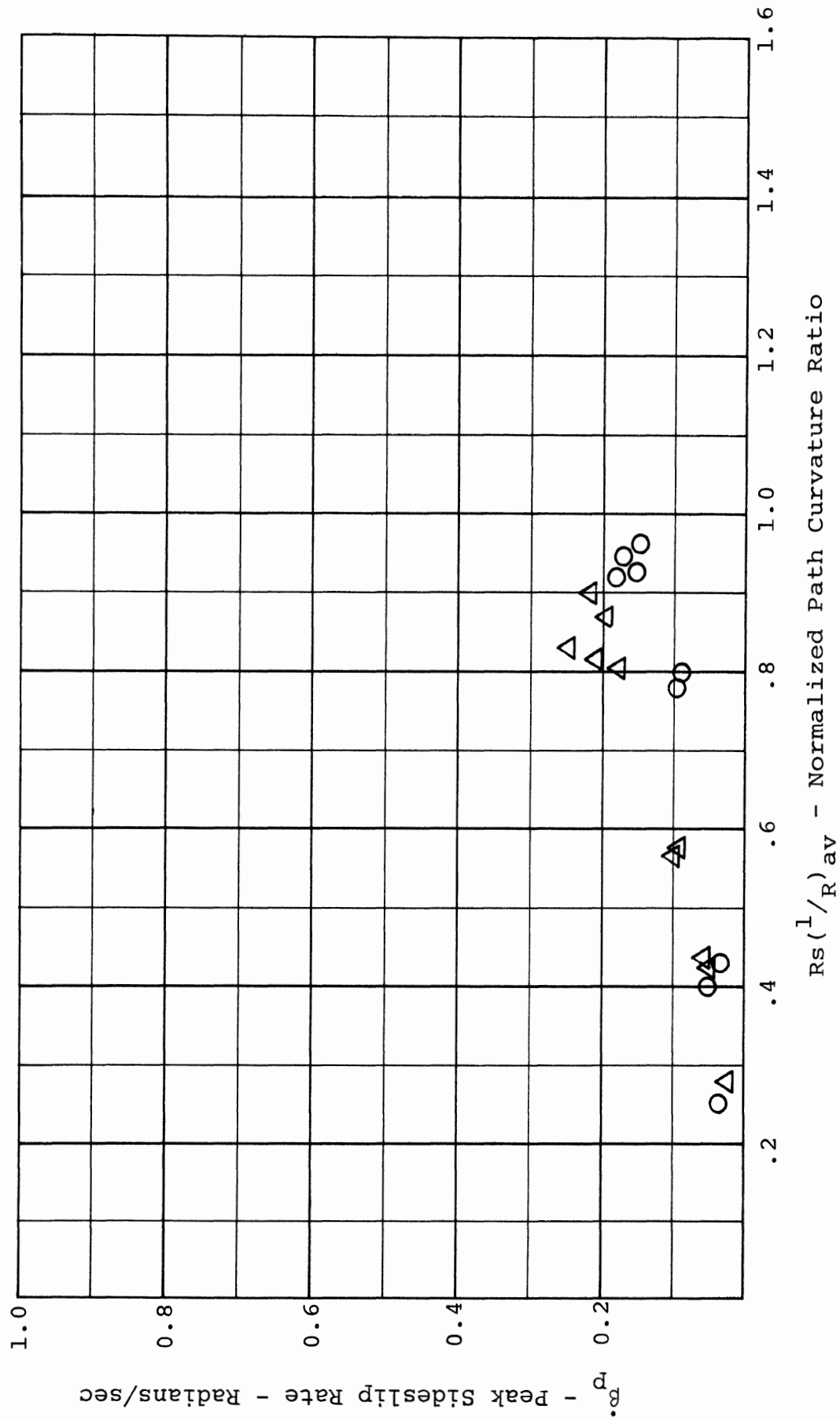




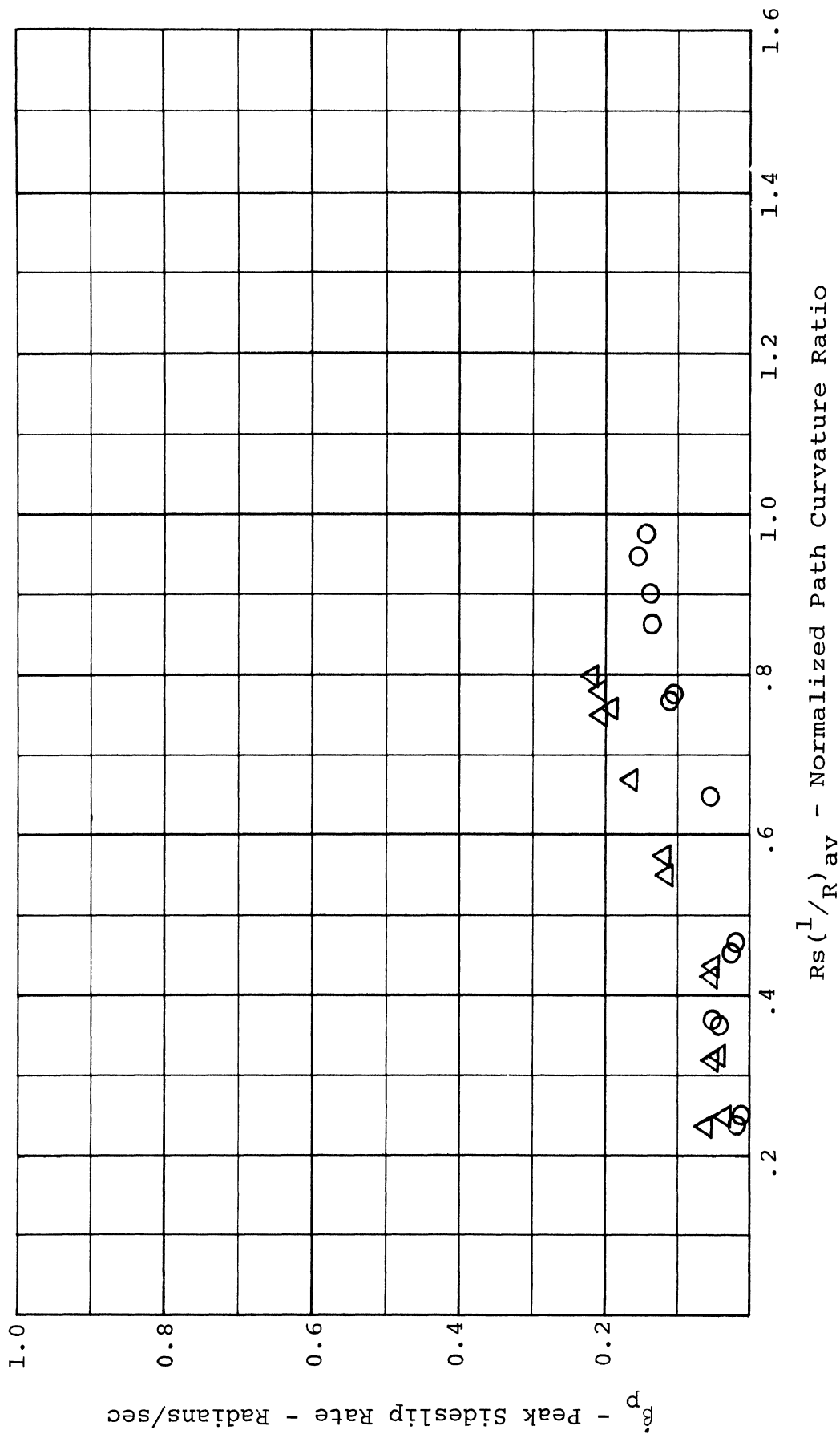
TRAPEZOIDAL STEER - BROOKWOOD



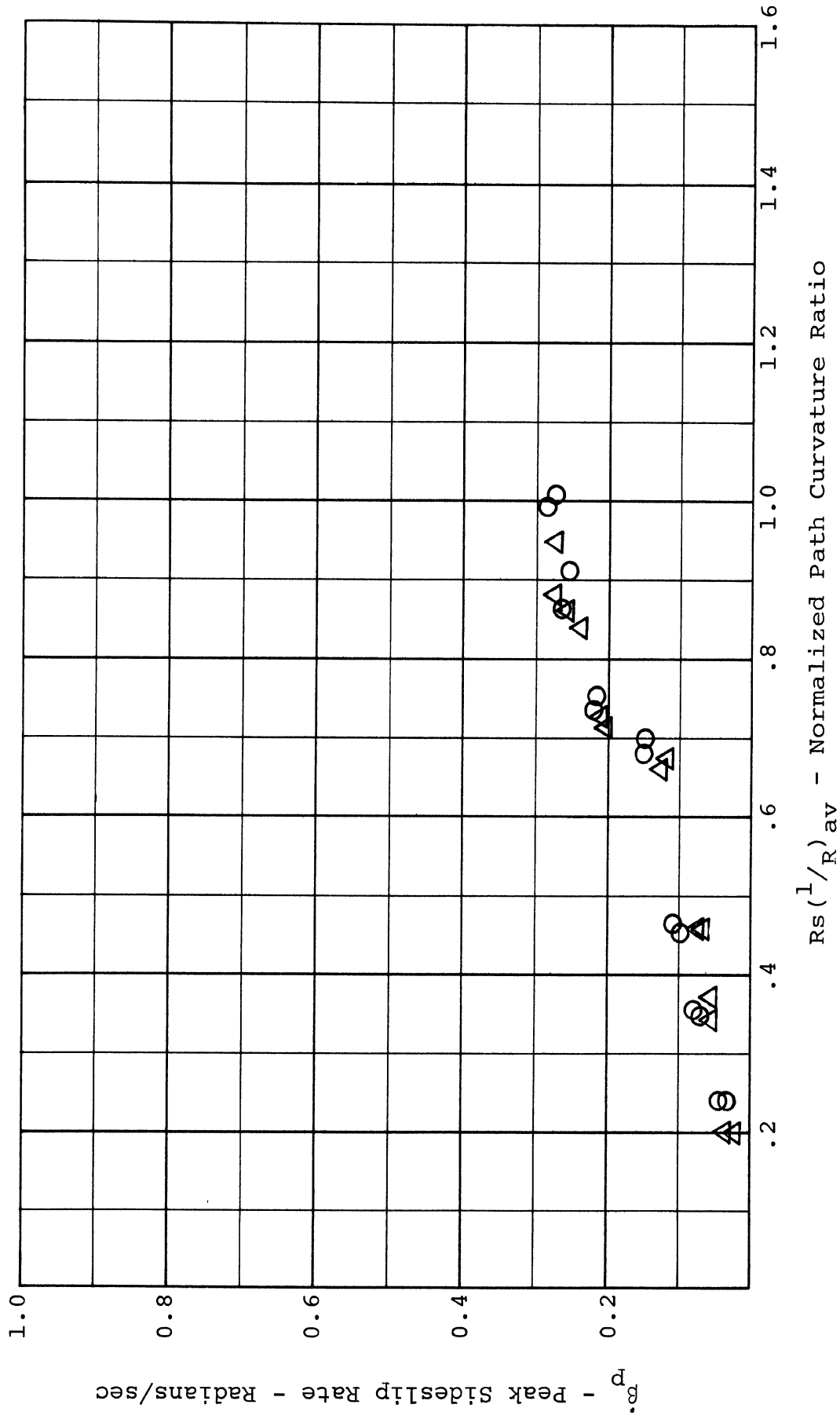
TRAPEZOIDAL STEER - DODGE



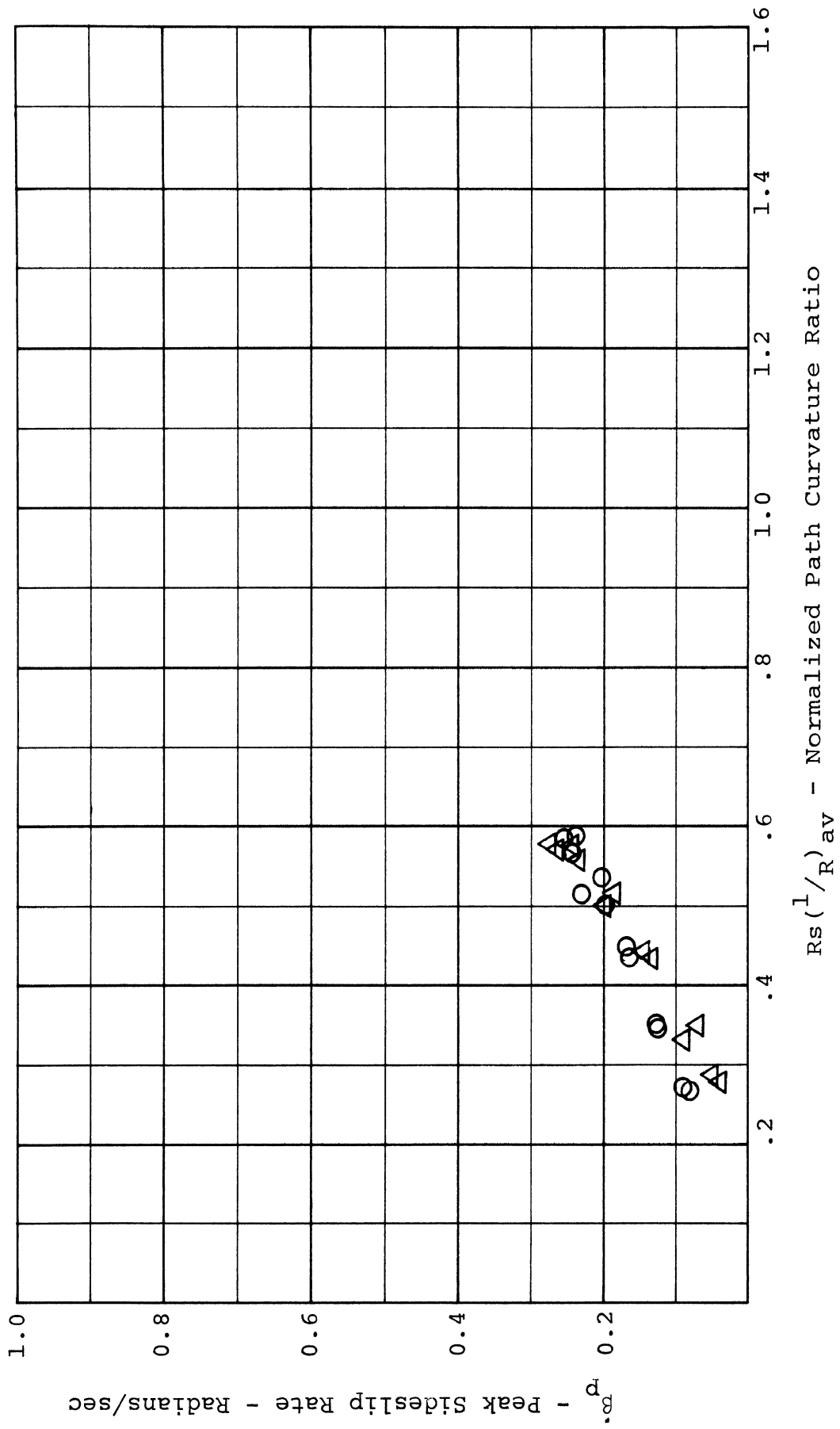
TRAPEZOIDAL STEER - FIREBIRD



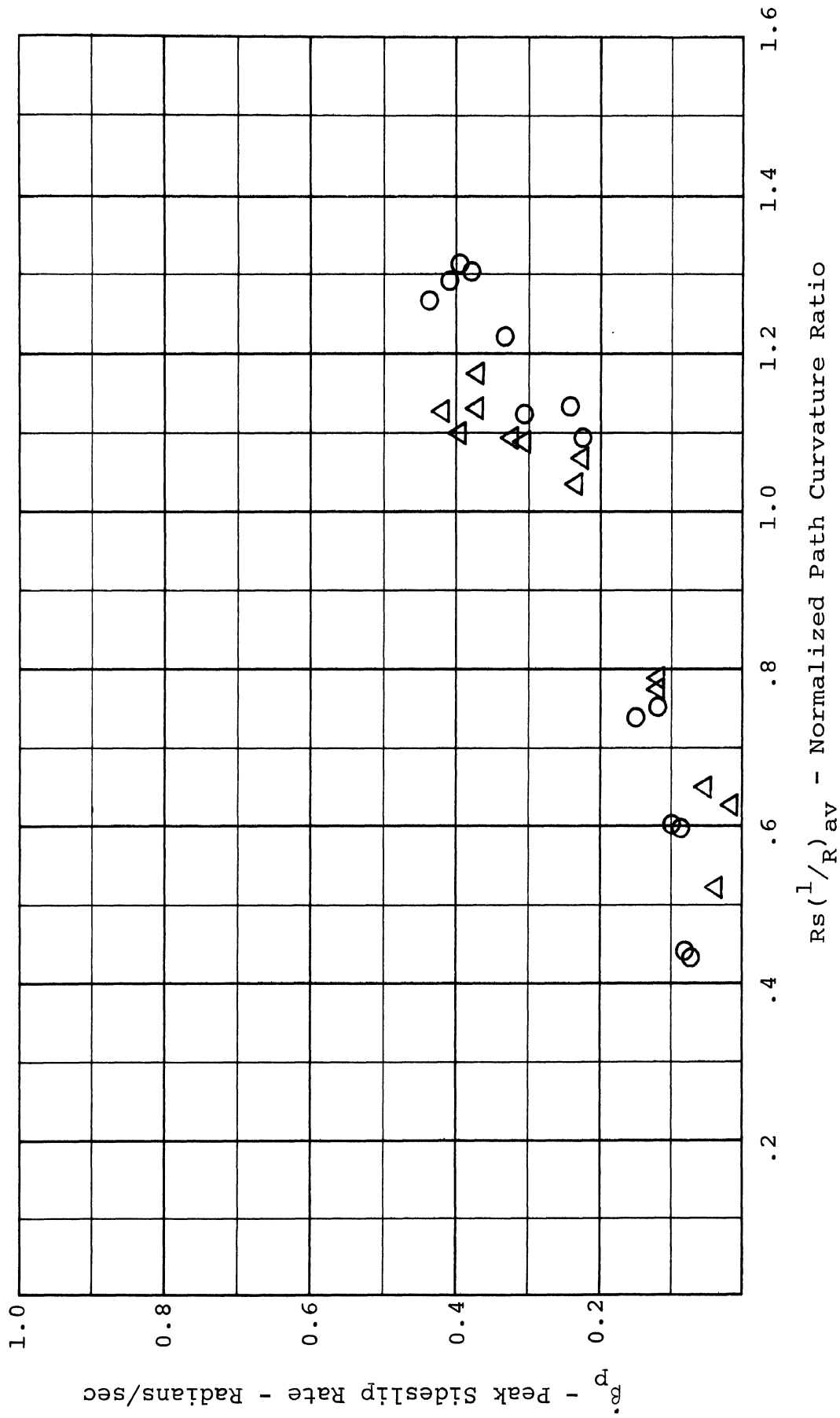
TRAPEZOIDAL STEER - GALAXIE



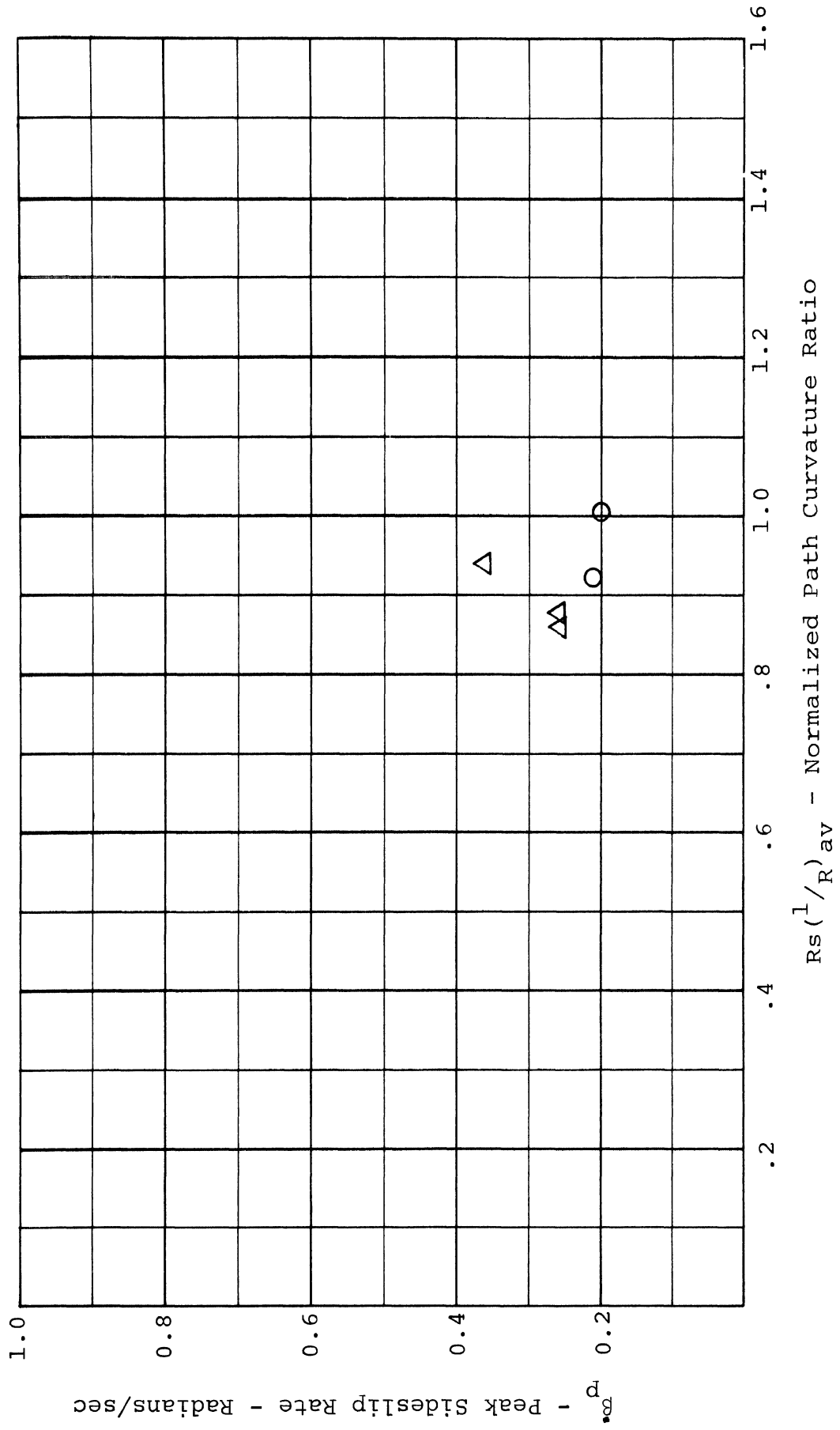
TRAPEZOIDAL STEER - GREMLIN



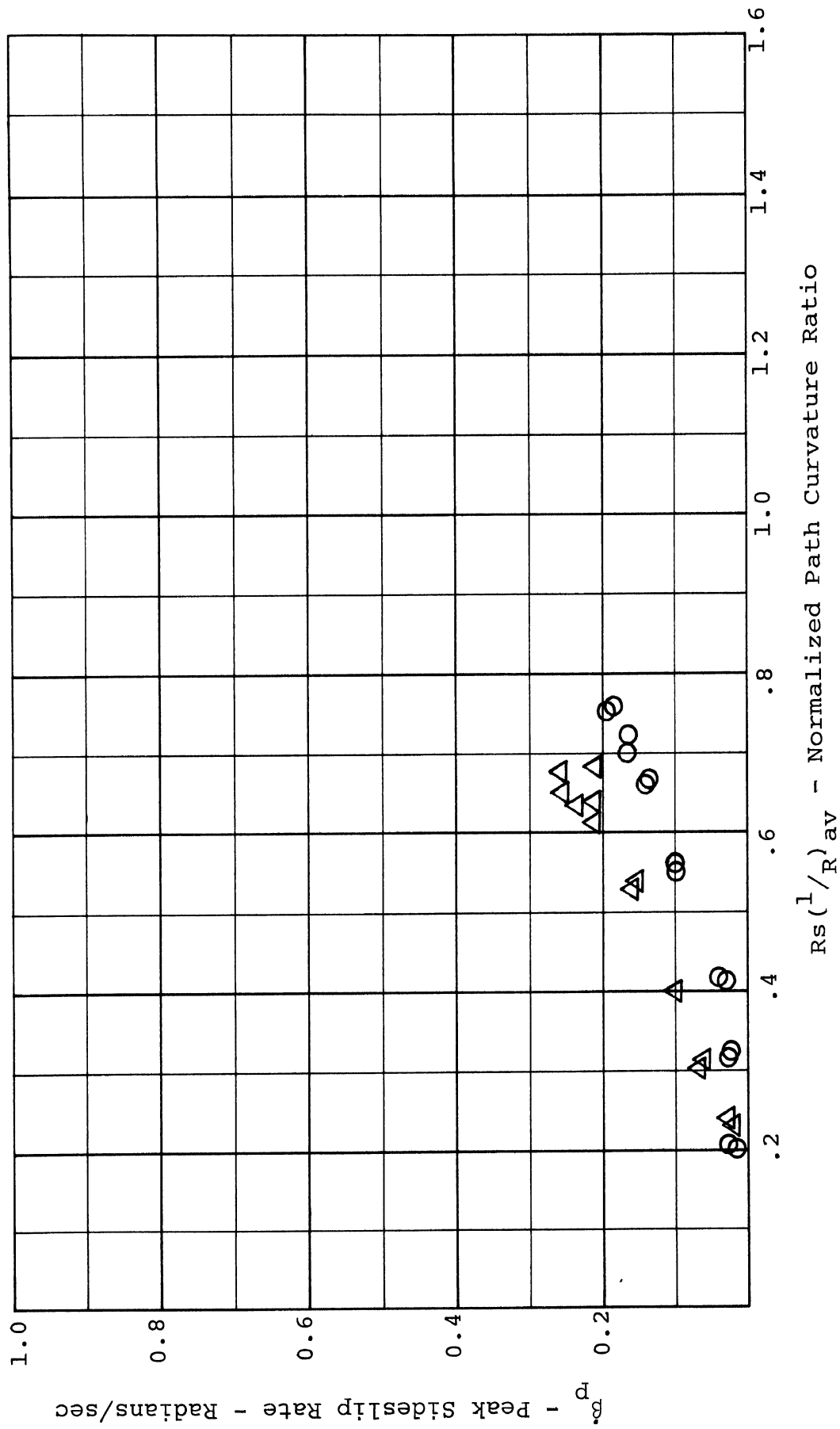
TRAPEZOIDAL STEER - IMPERIAL



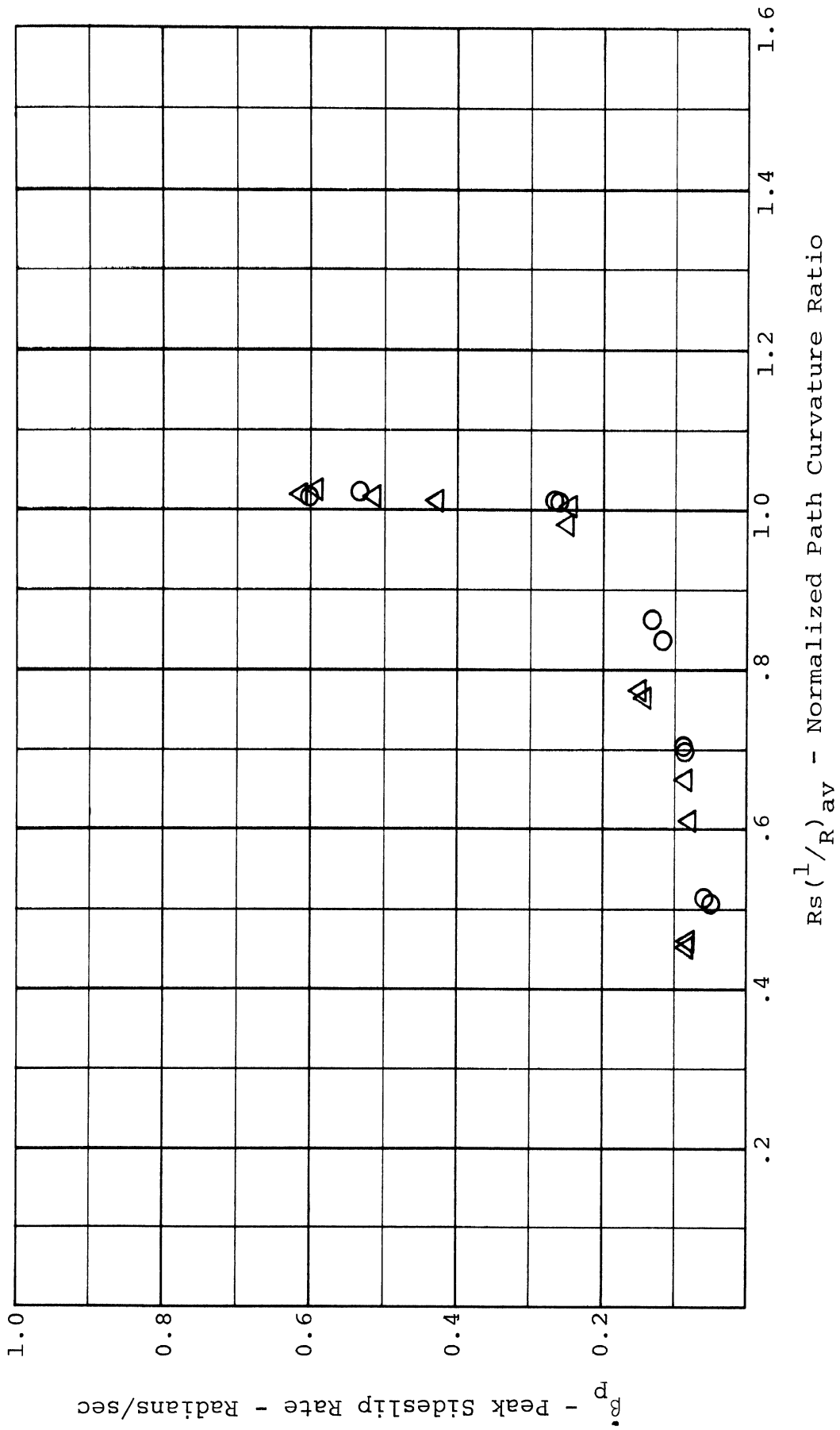
TRAPEZOIDAL STEER - LOTUS



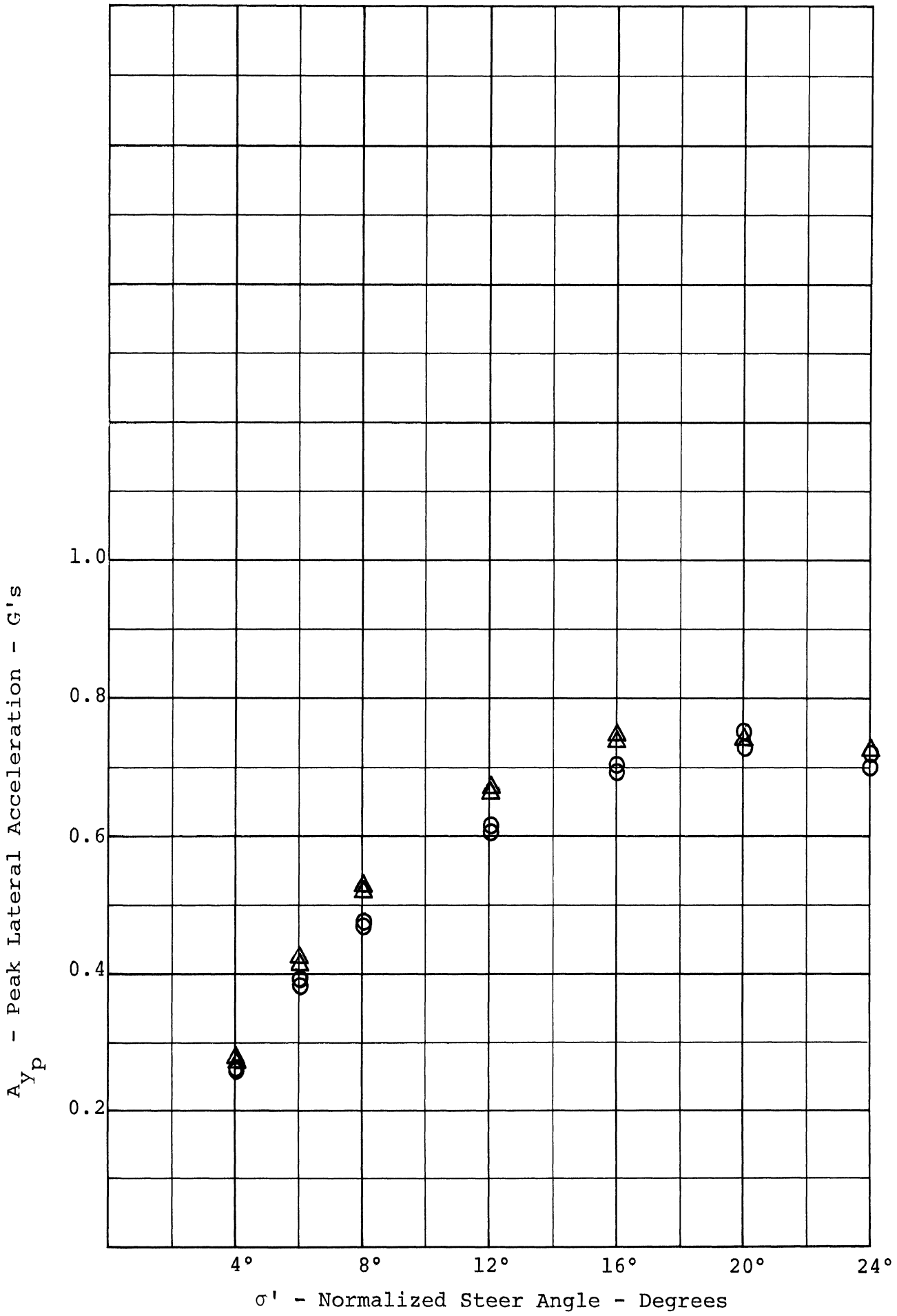
TRAPEZOIDAL STEER - MERCEDES



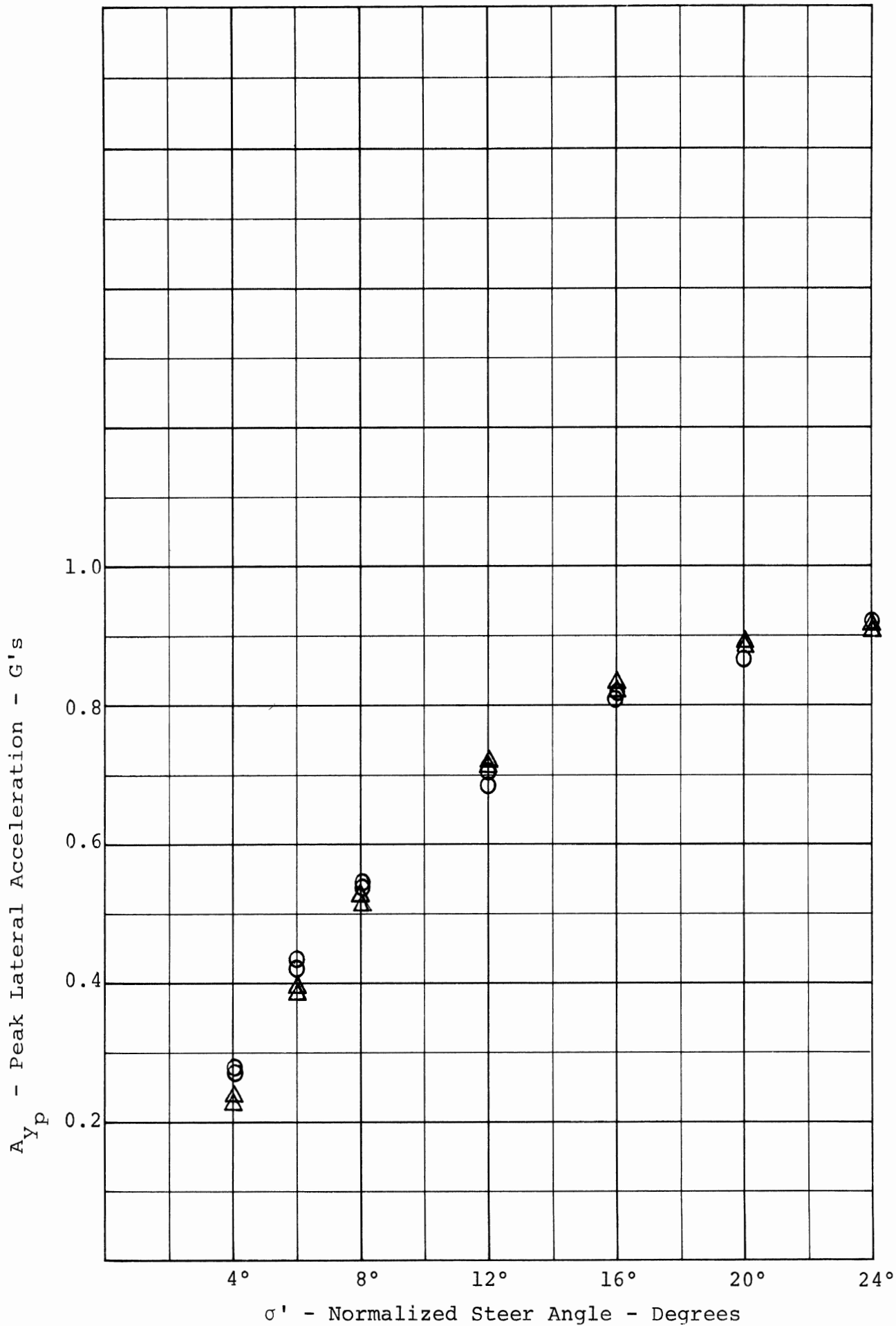
TRAPEZOIDAL STEER - TORONADO



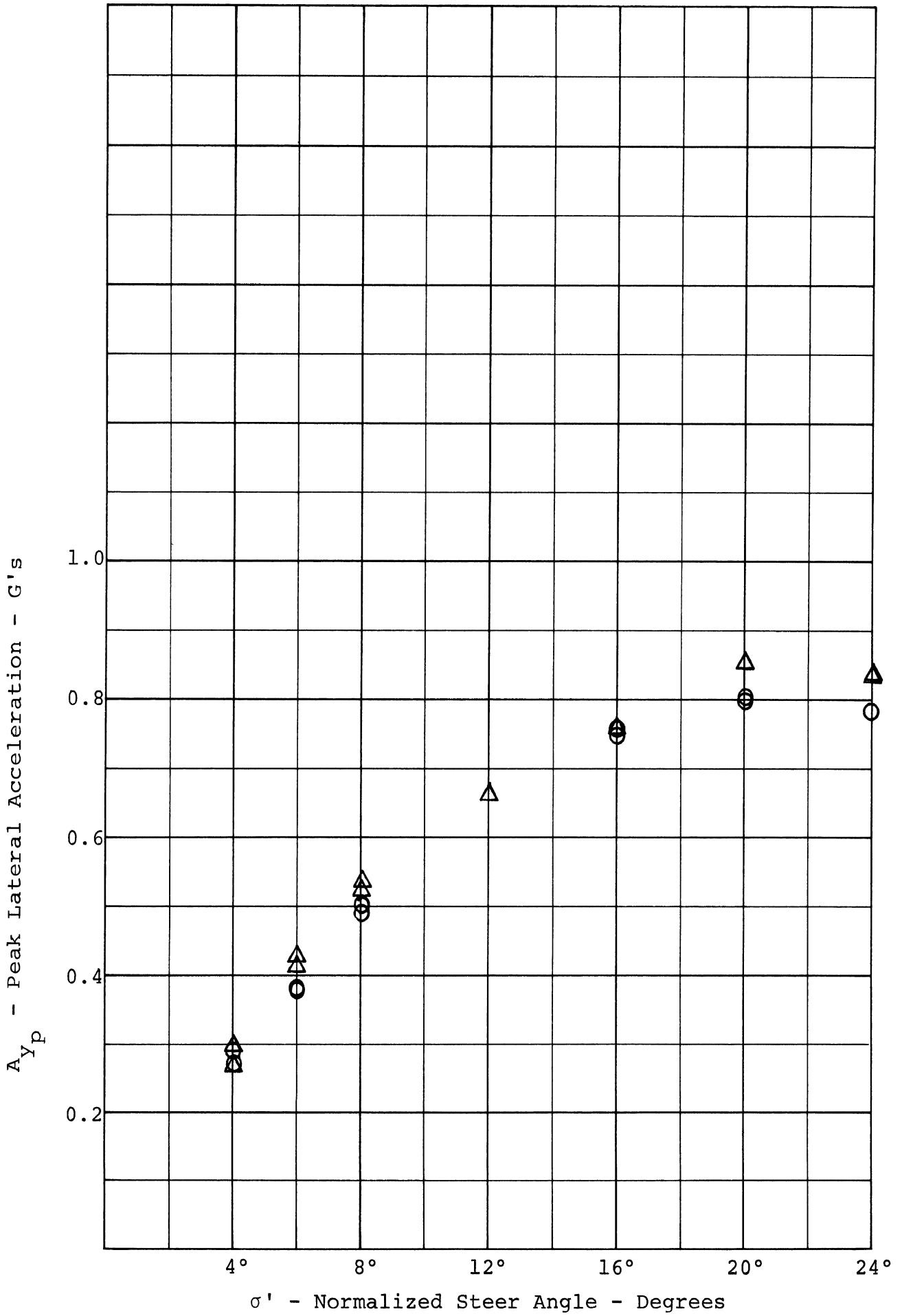
TRAPEZOIDAL STEER - VW



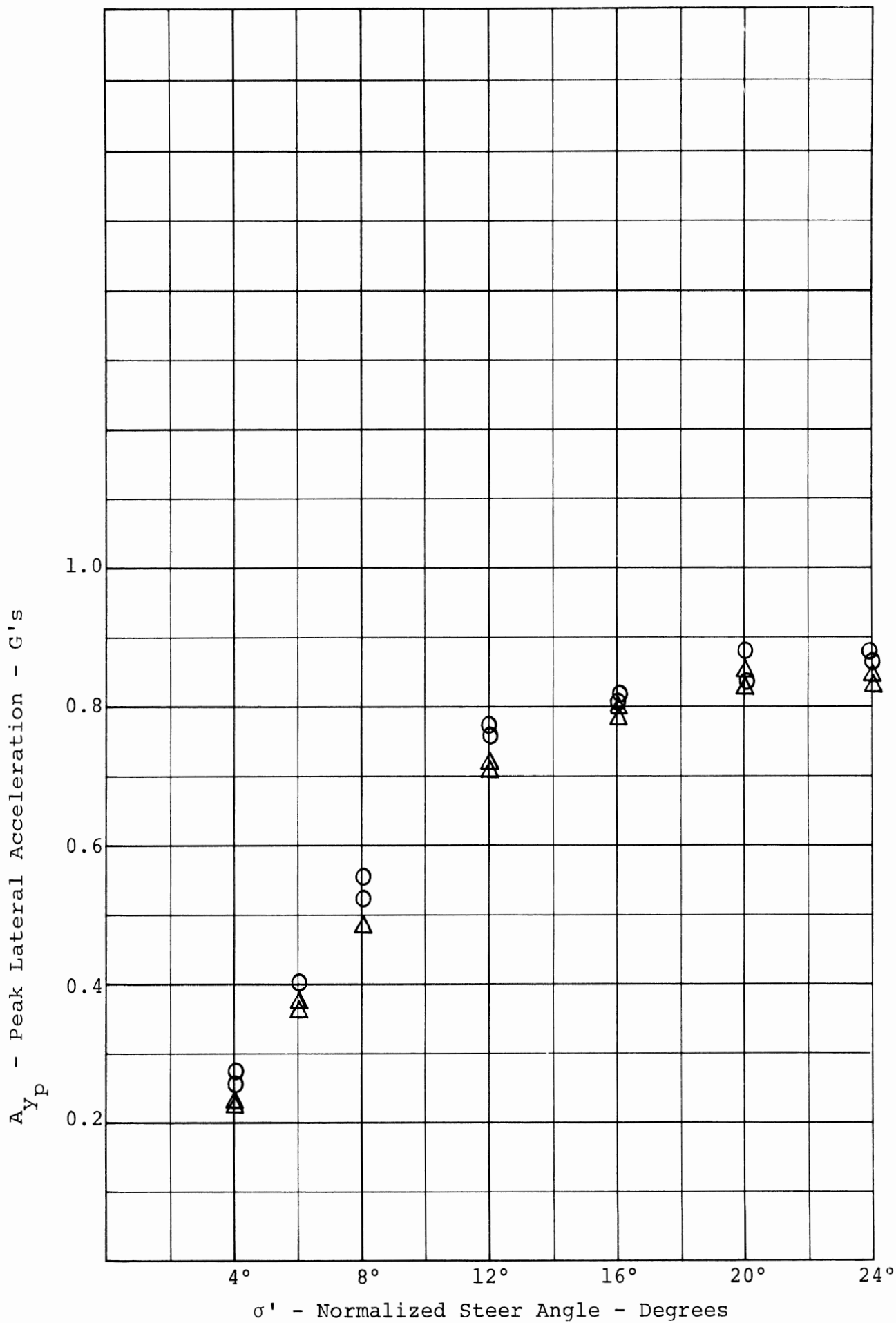
TRAPEZOIDAL STEER - AMBASSADOR



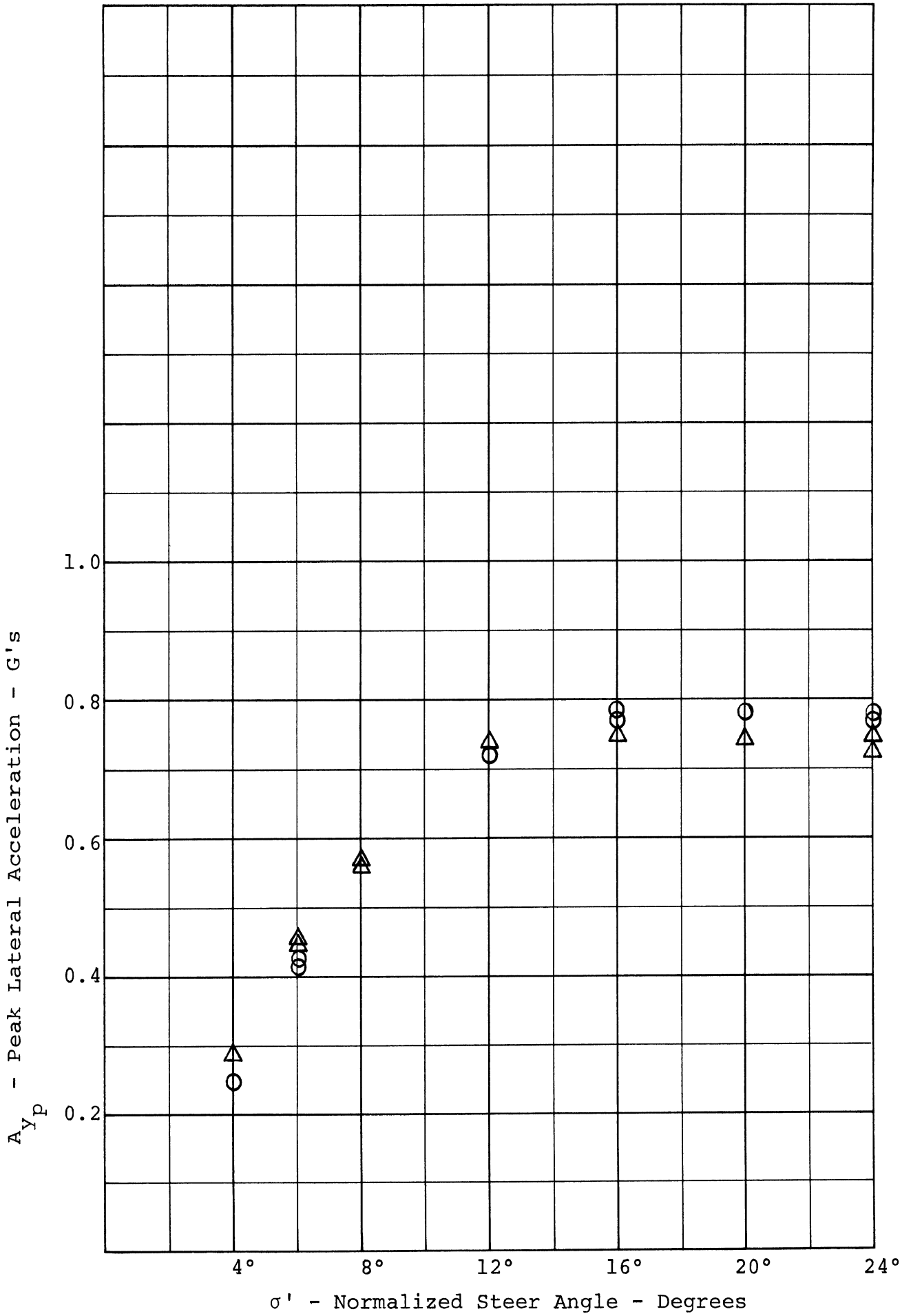
TRAPEZOIDAL STEER - AUSTIN



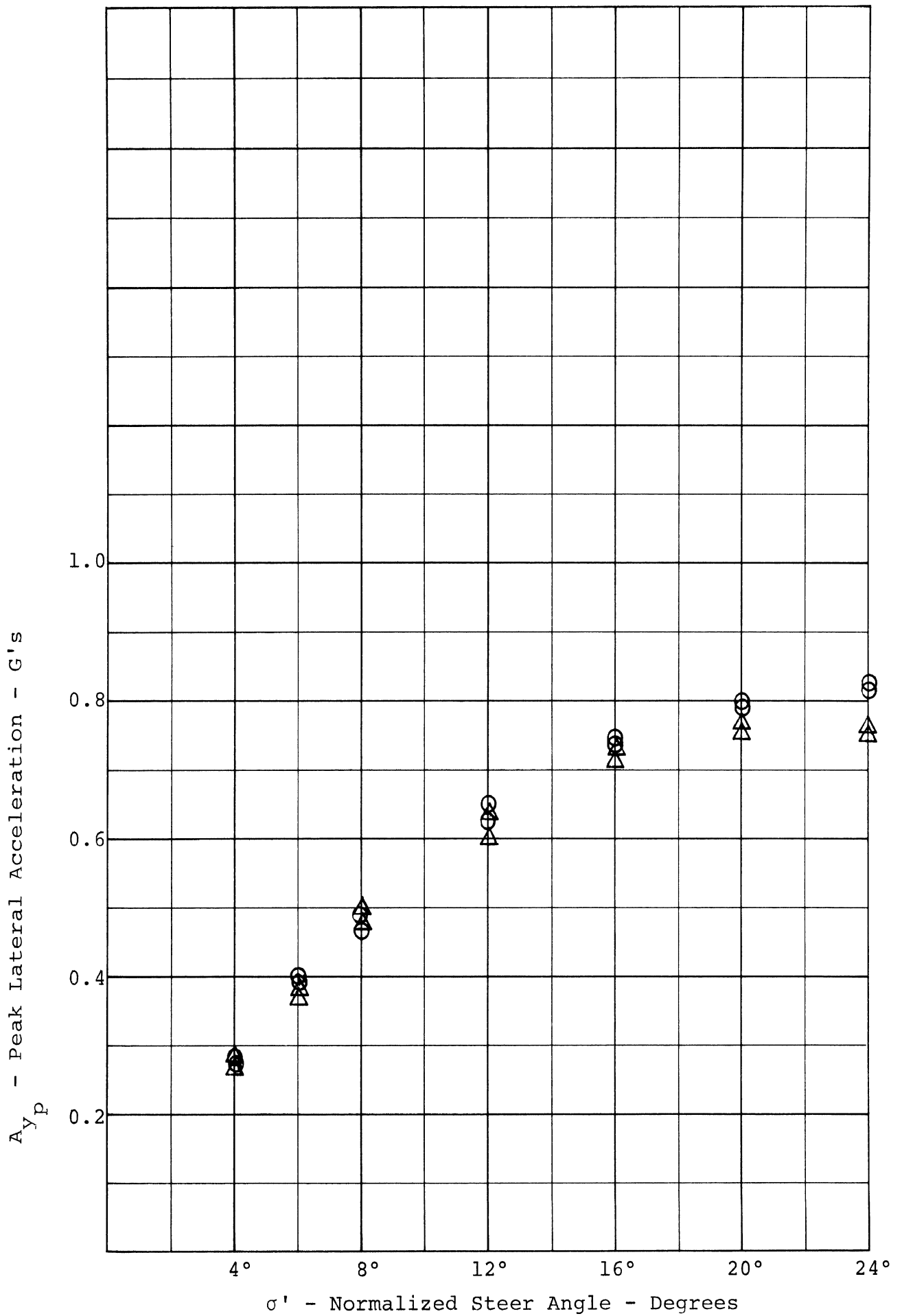
TRAPEZOIDAL STEER - BROOKWOOD



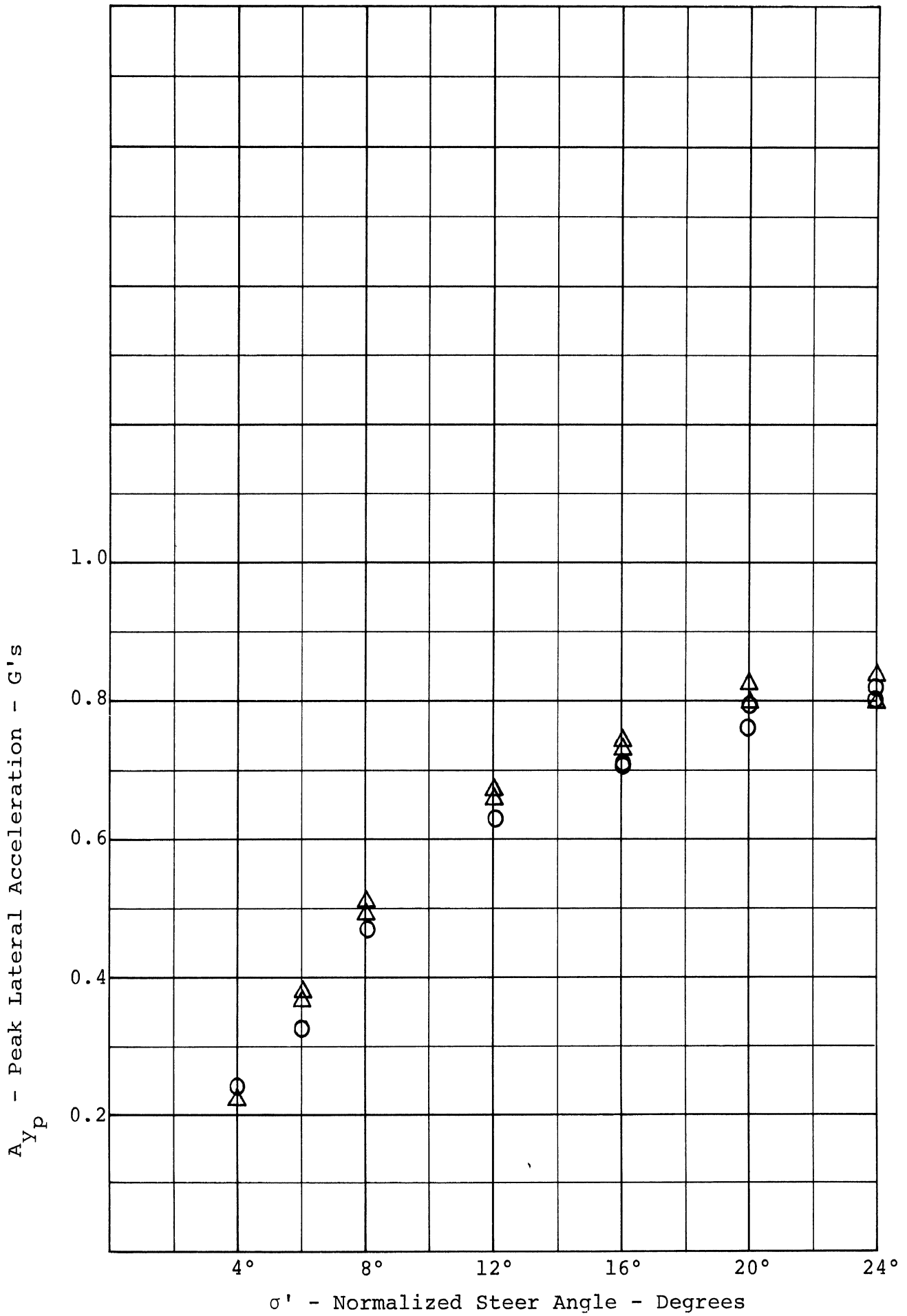
TRAPEZOIDAL STEER - DODGE



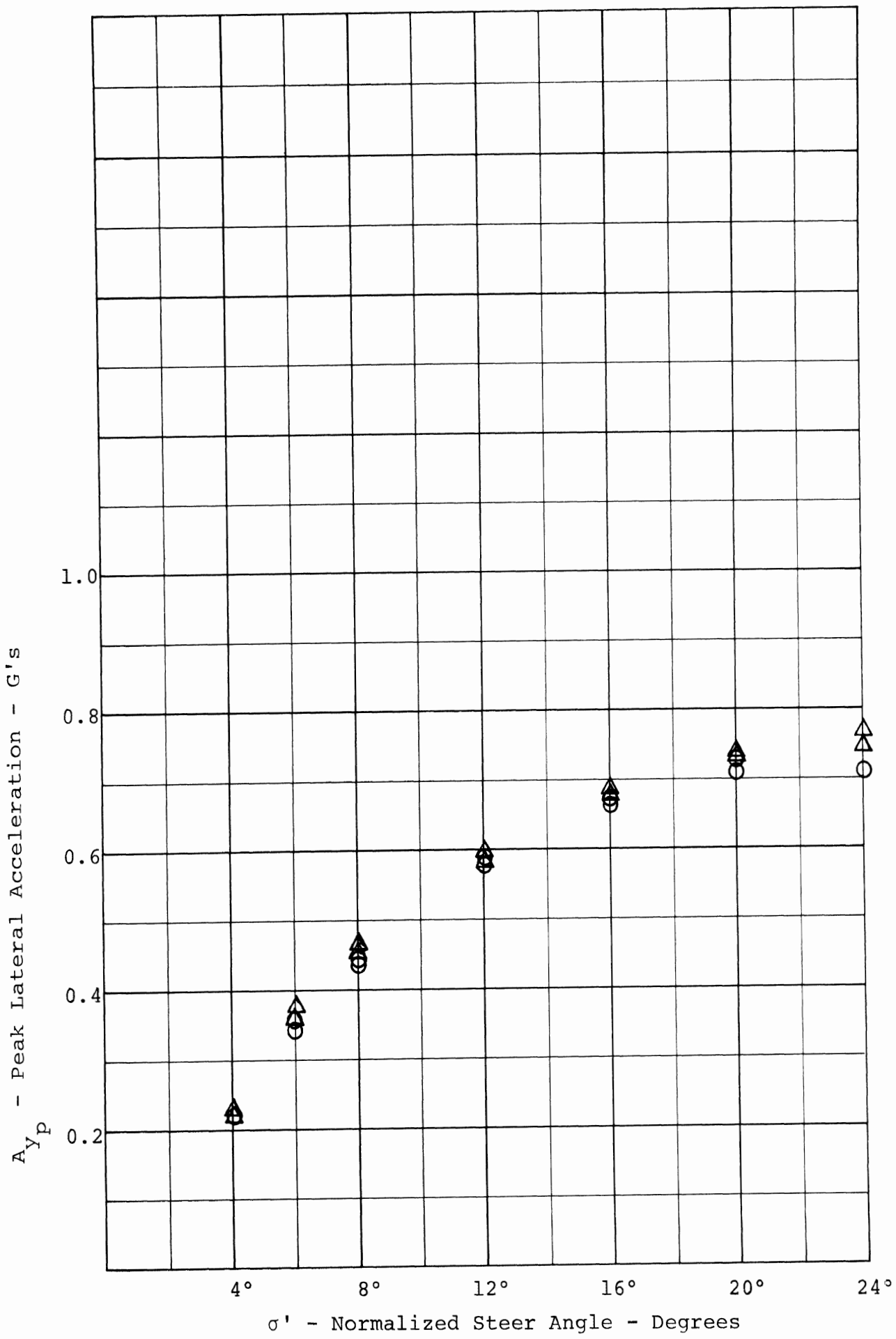
TRAPEZOIDAL STEER - FIREBIRD



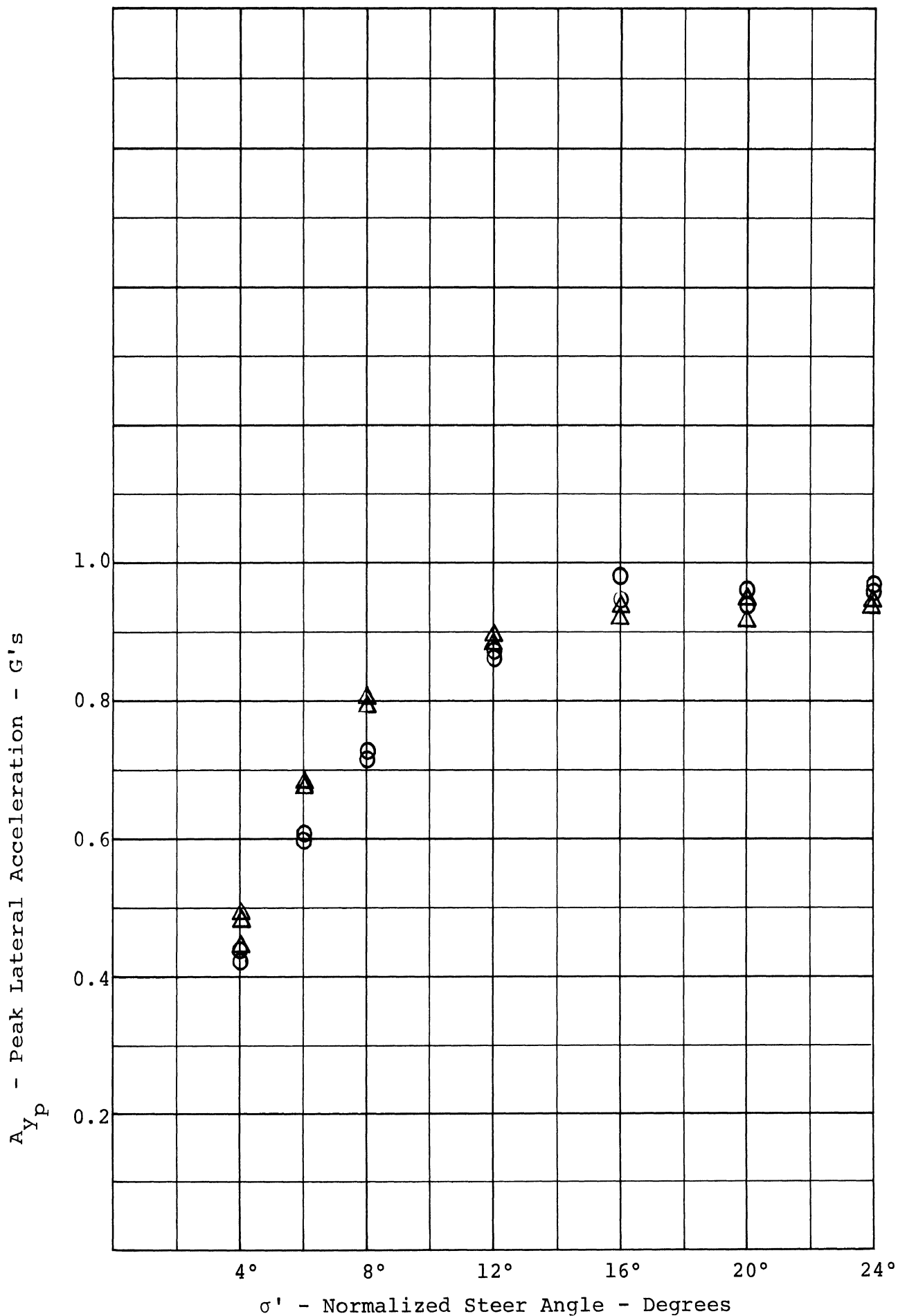
TRAPEZOIDAL STEER - GALAXIE



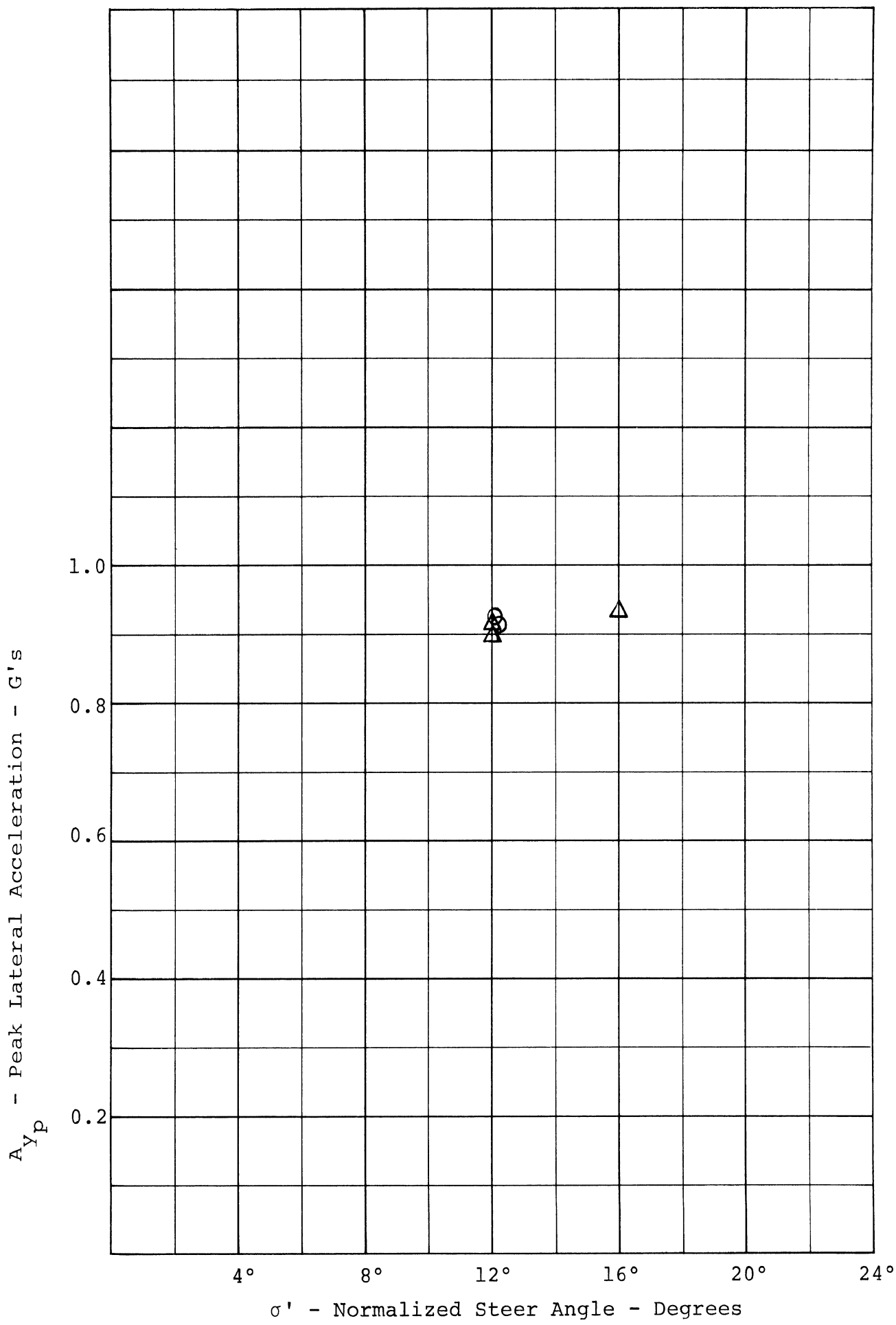
TRAPEZOIDAL STEER - GREMLIN



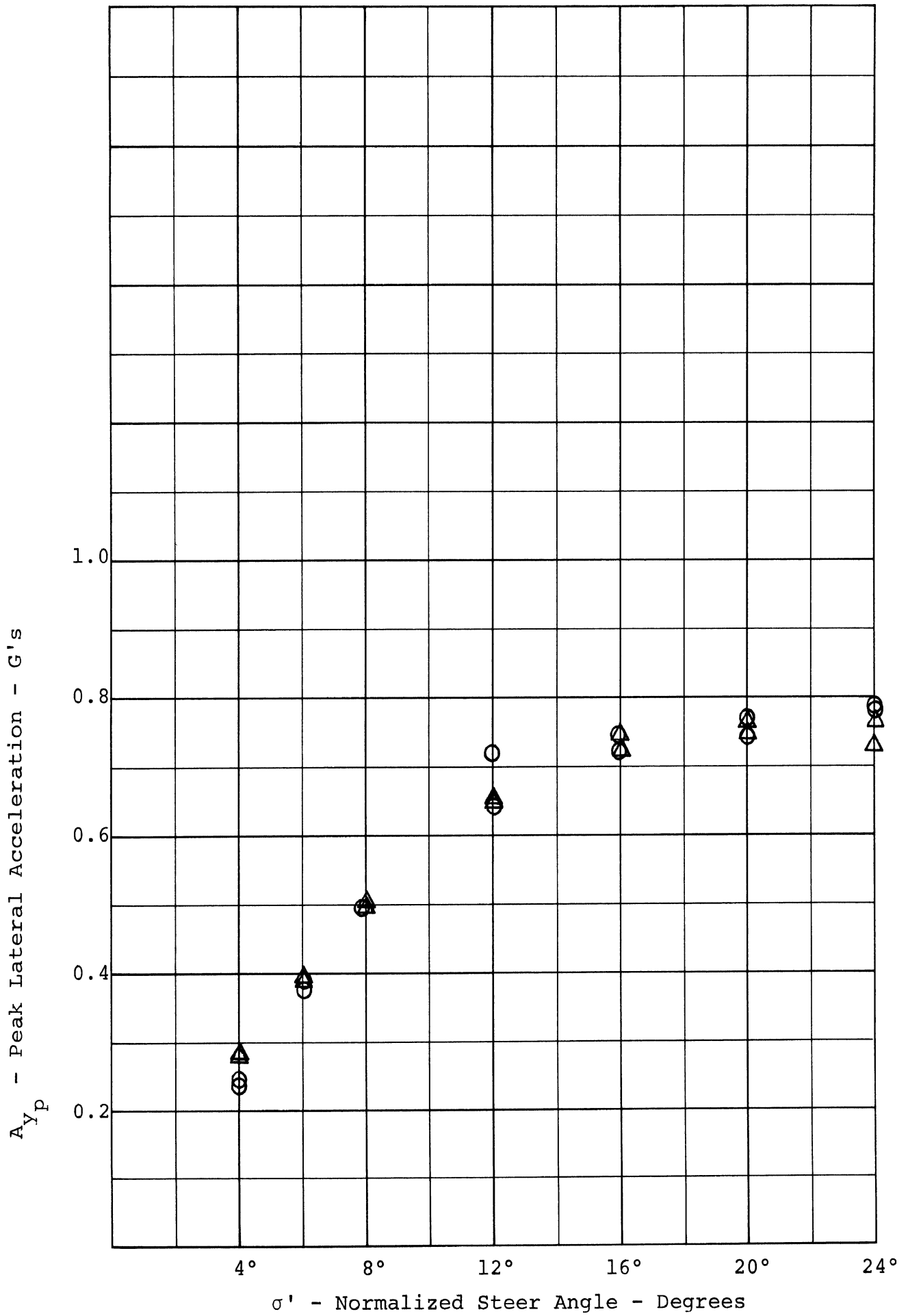
TRAPEZOIDAL STEER - IMPERIAL



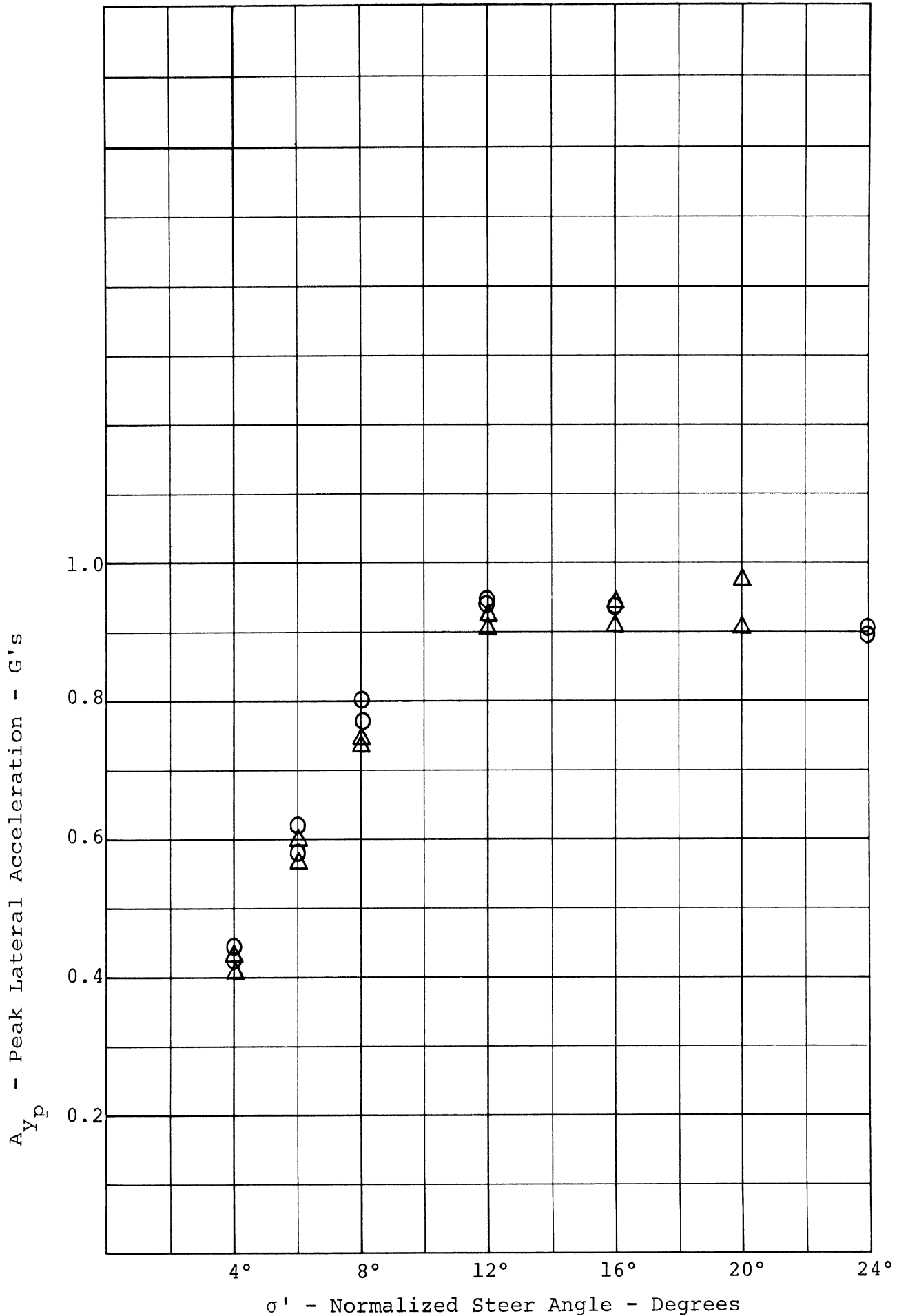
TRAPEZOIDAL STEER - LOTUS



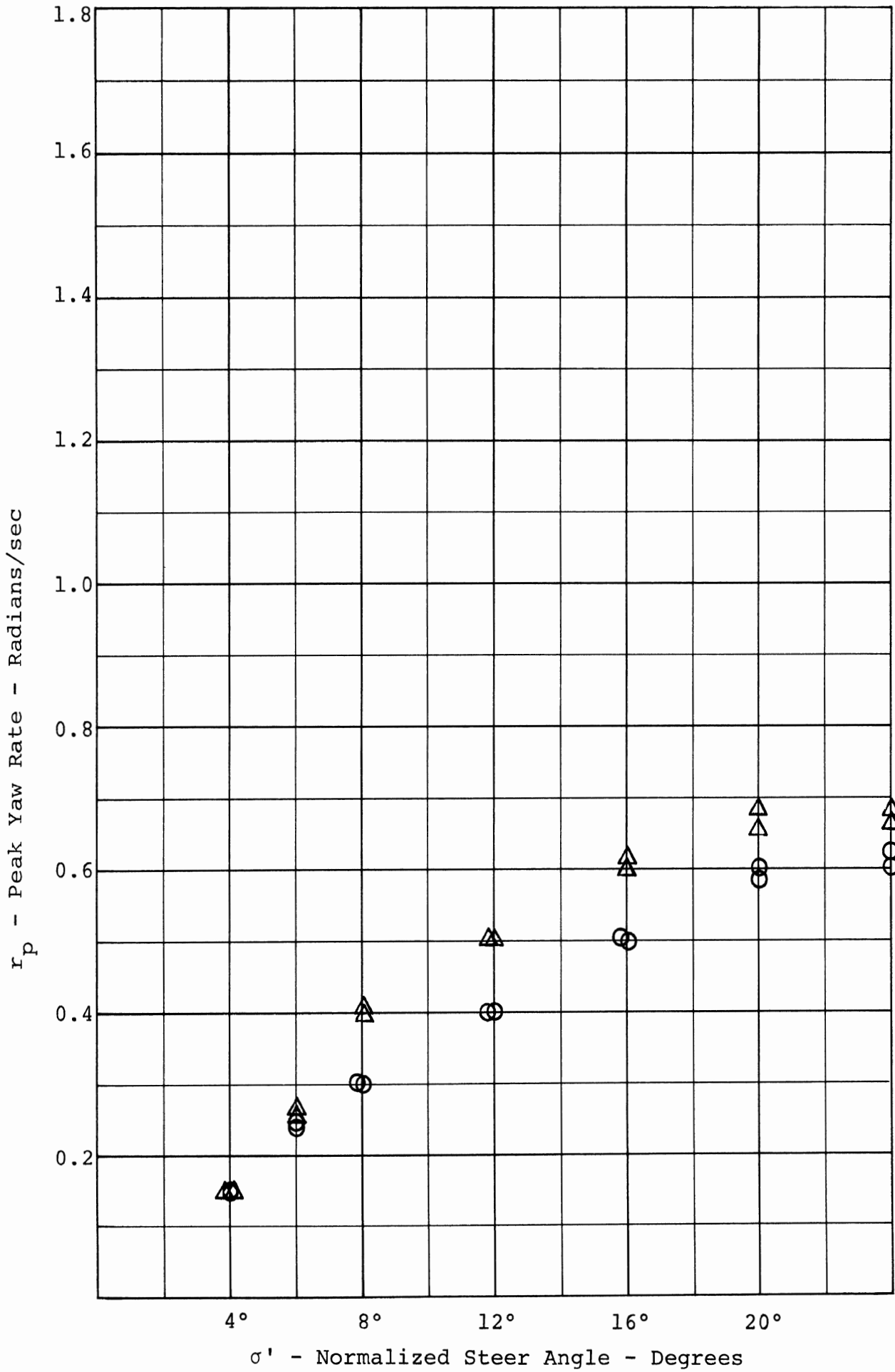
TRAPEZOIDAL STEER - MERCEDES



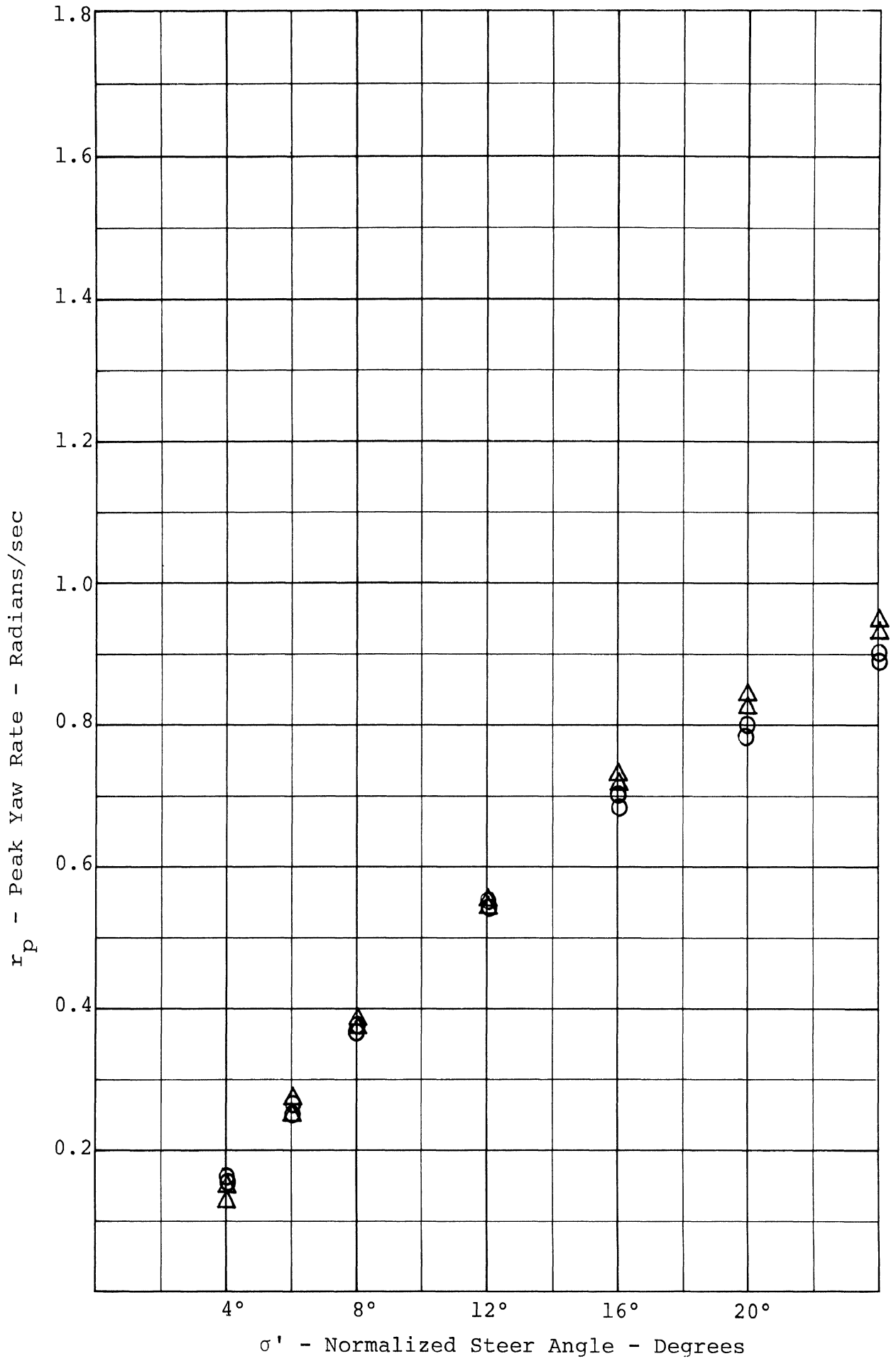
TRAPEZOIDAL STEER - TORONADO



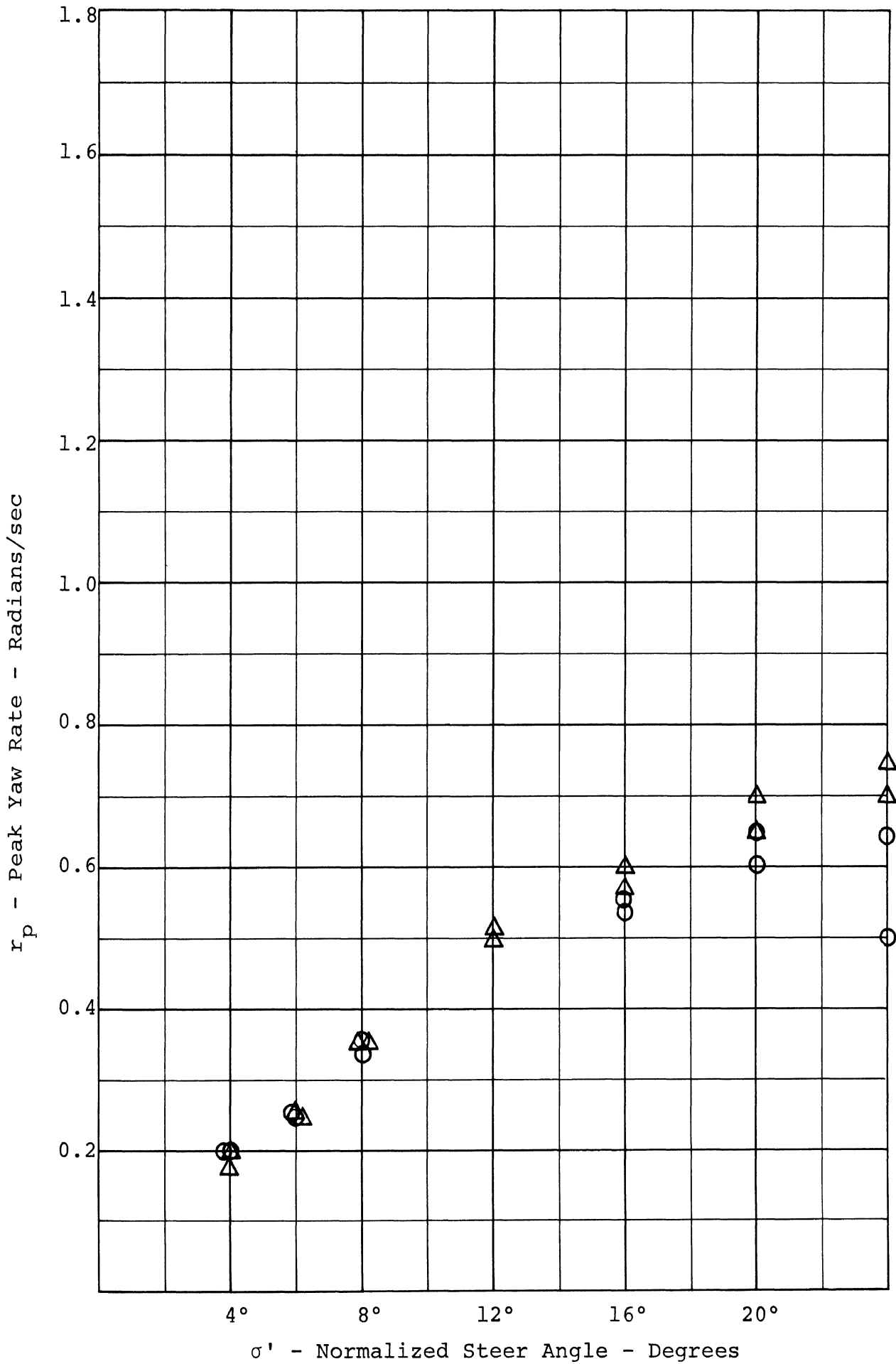
TRAPEZOIDAL STEER - VW



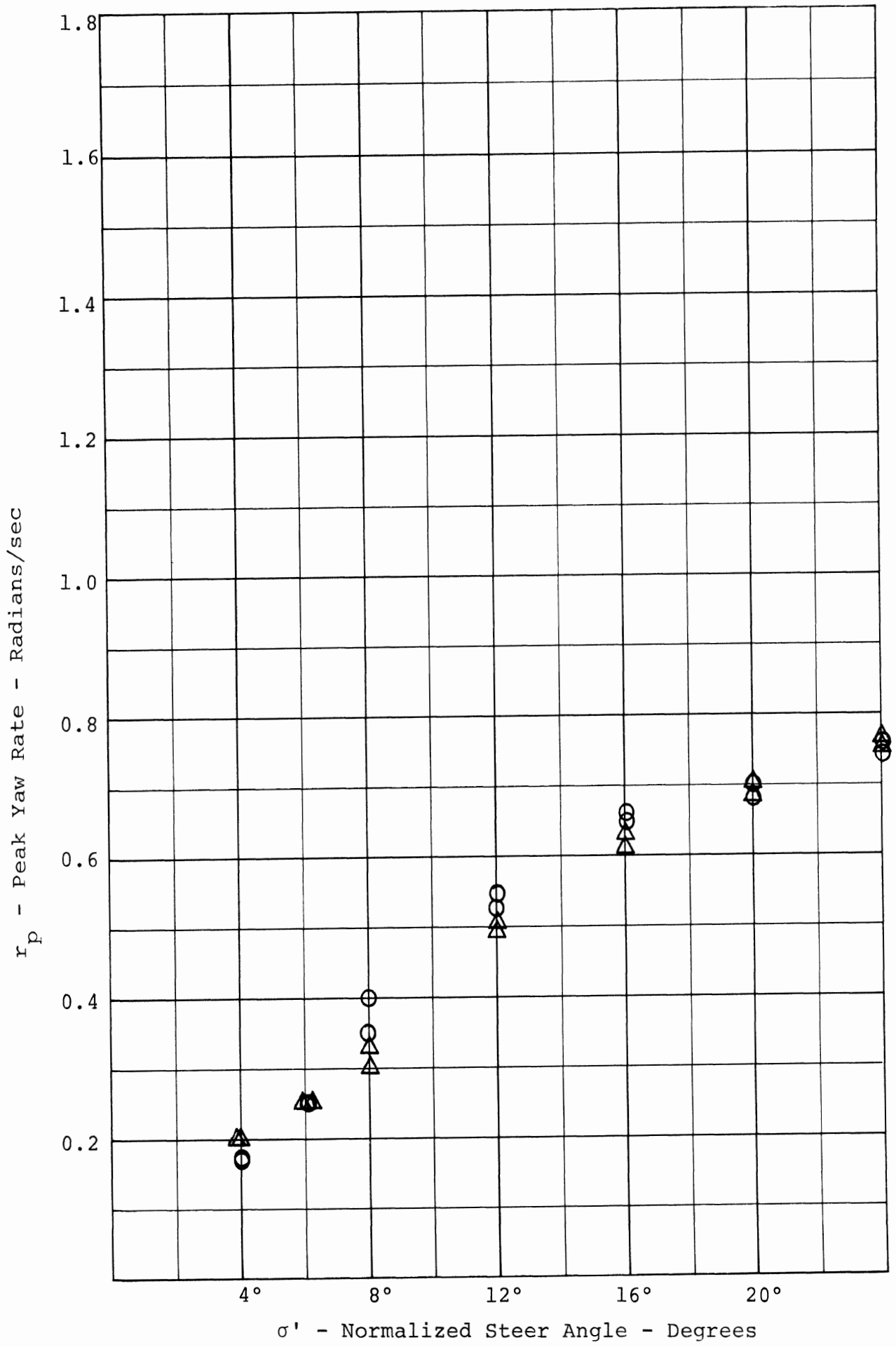
TRAPEZOIDAL STEER - AMBASSADOR



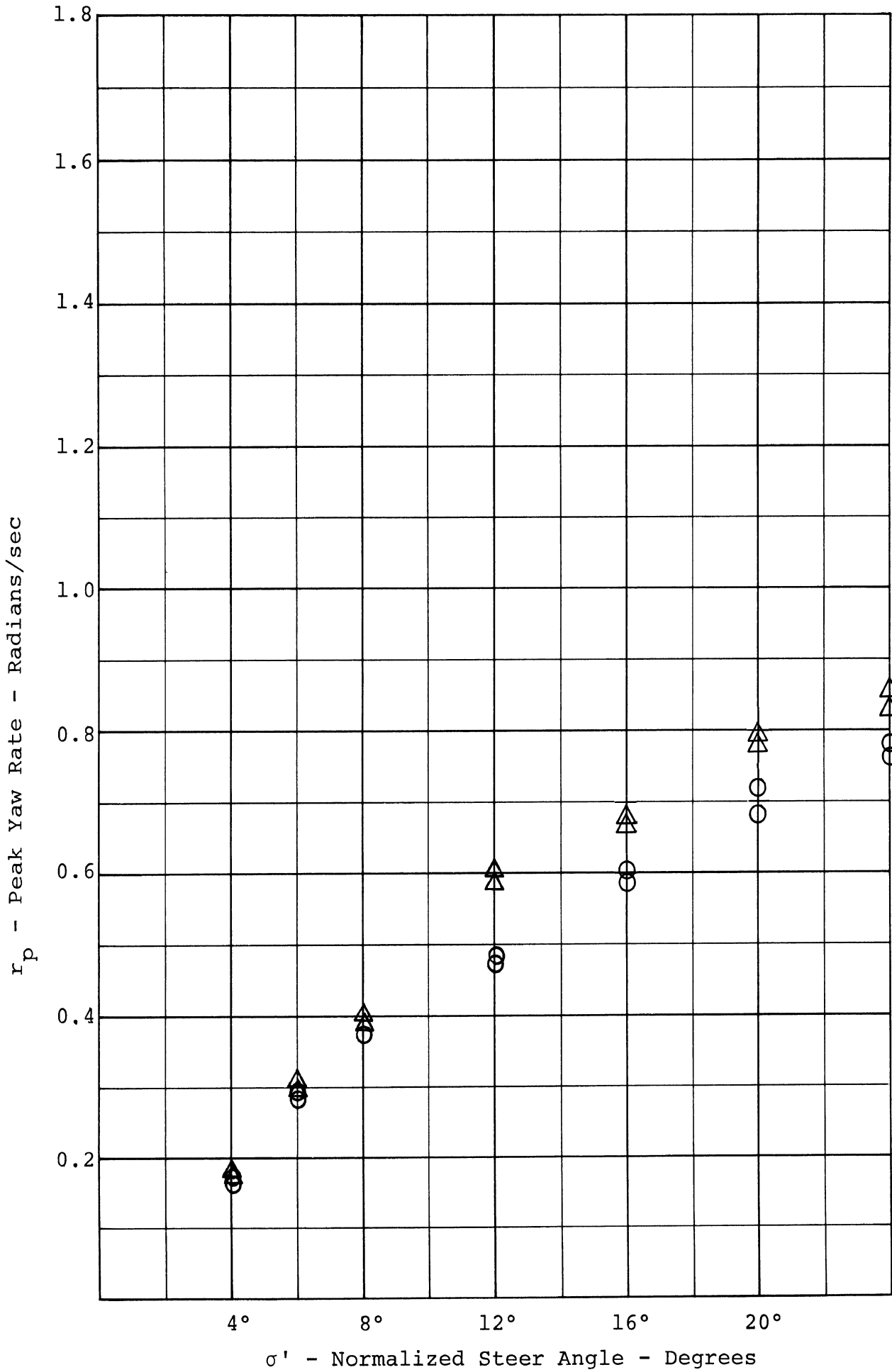
TRAPEZOIDAL STEER - AUSTIN



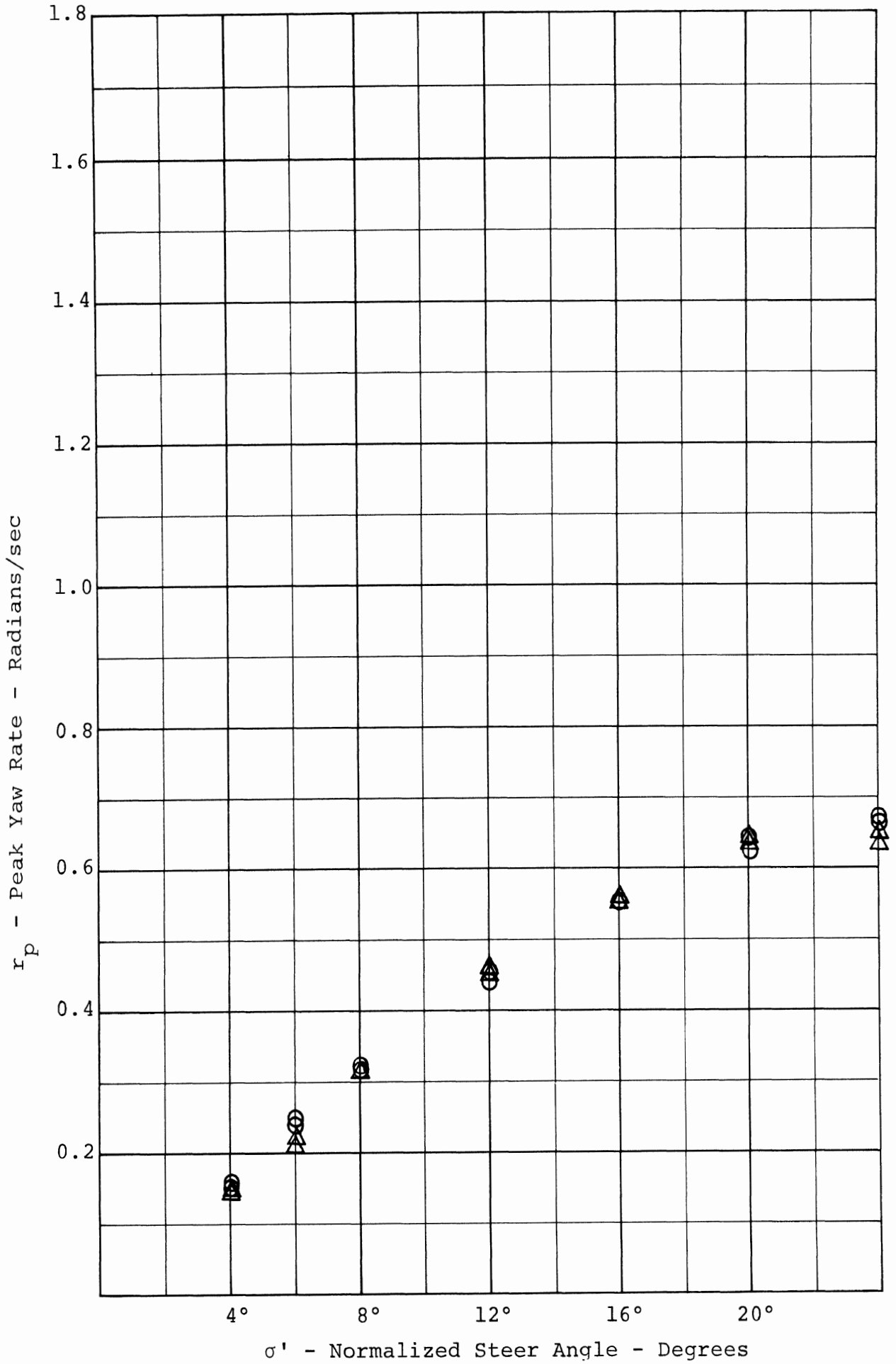
TRAPEZOIDAL STEER - BROOKWOOD



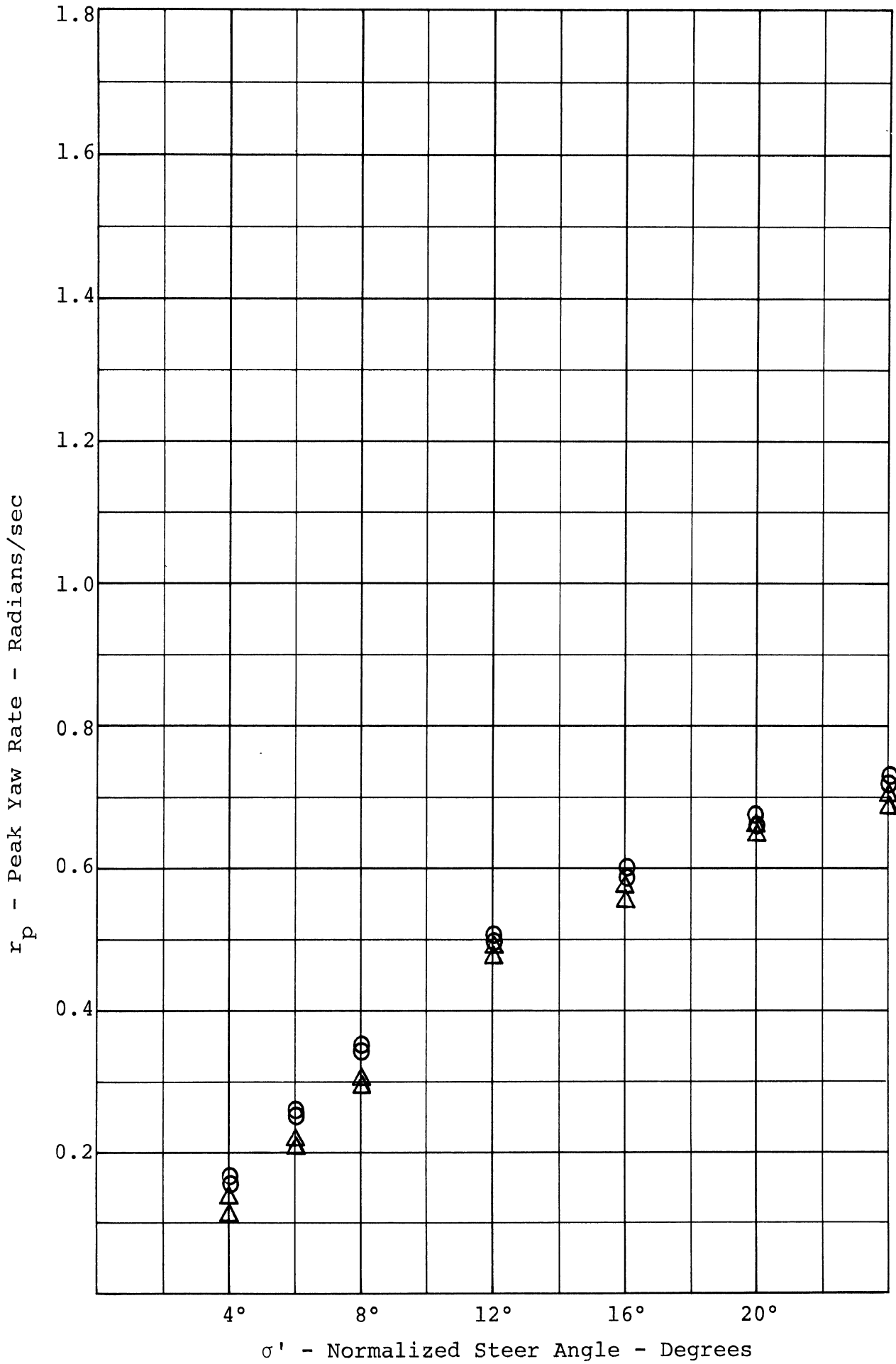
TRAPEZOIDAL STEER - DODGE



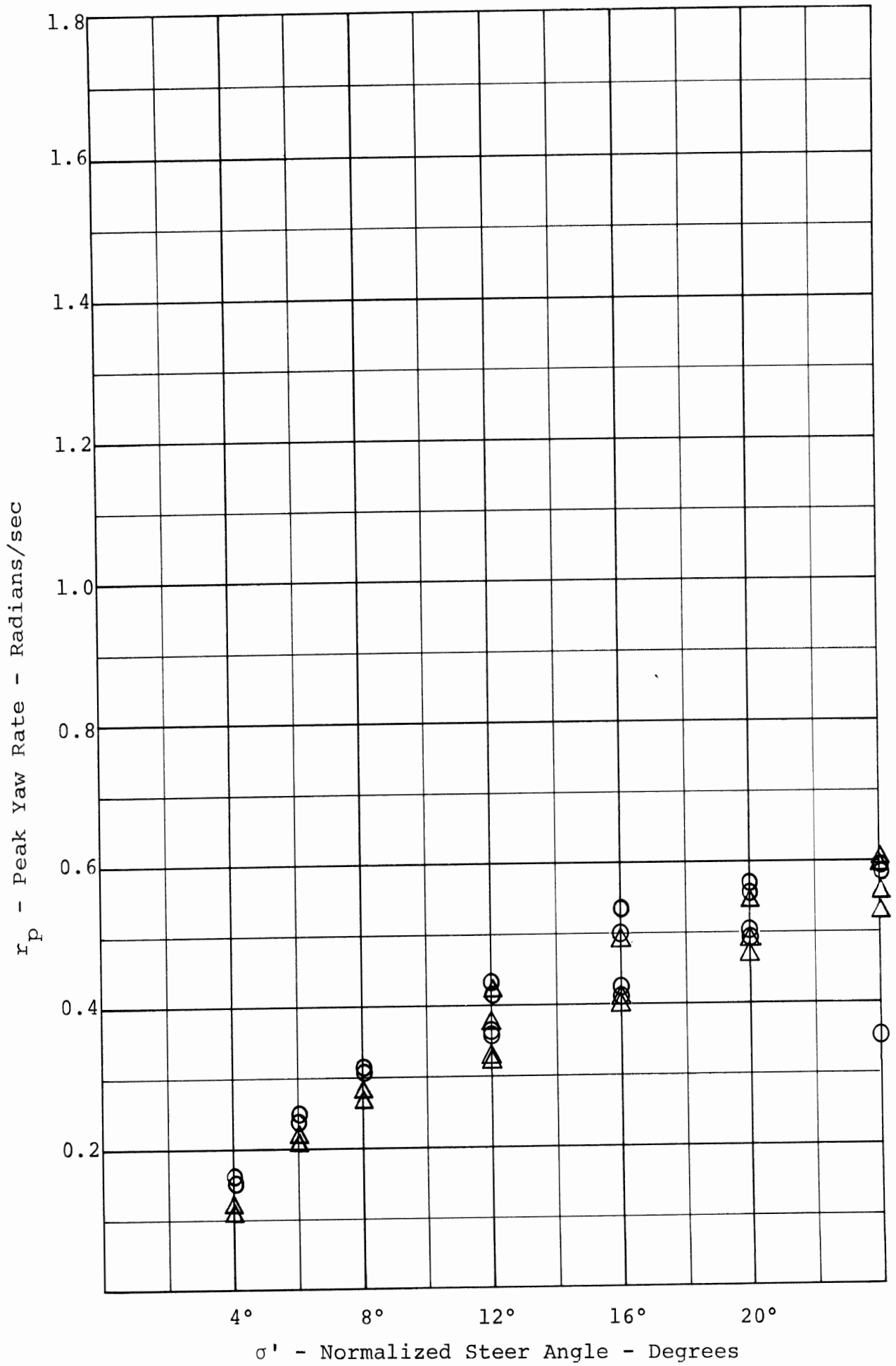
TRAPEZOIDAL STEER - FIREBIRD



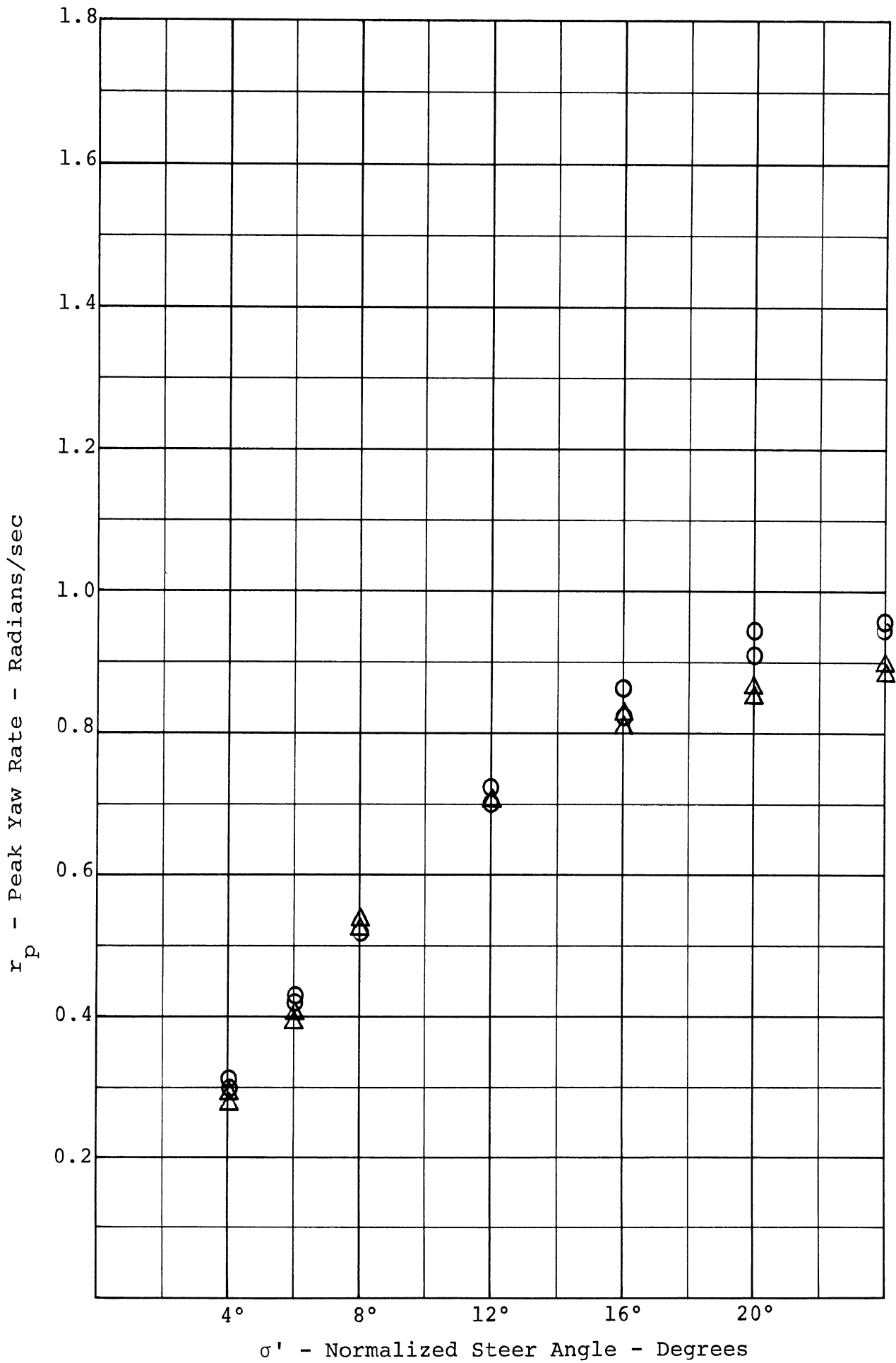
TRAPEZOIDAL STEER - GALAXIE



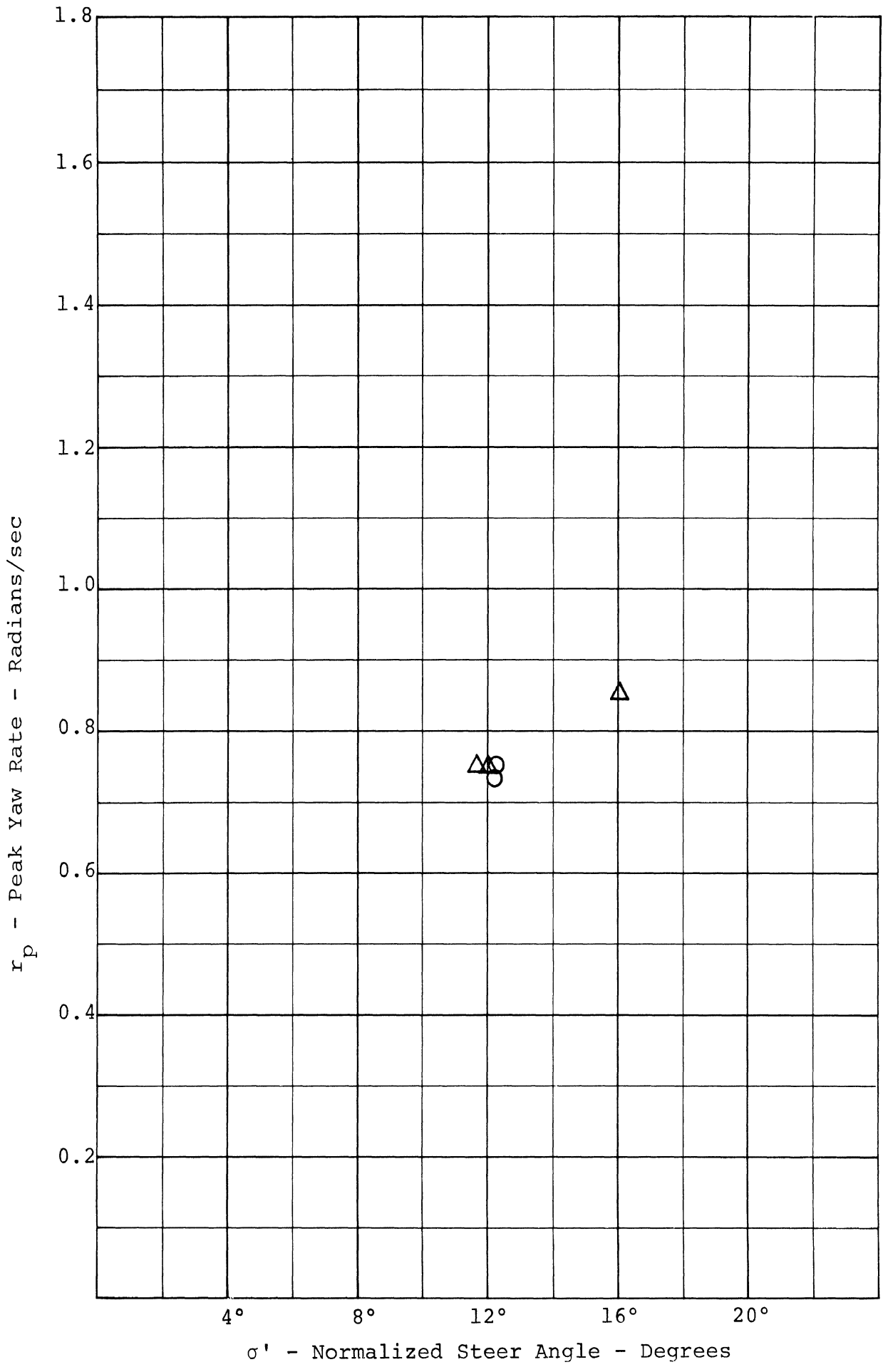
TRAPEZOIDAL STEER - GREMLIN



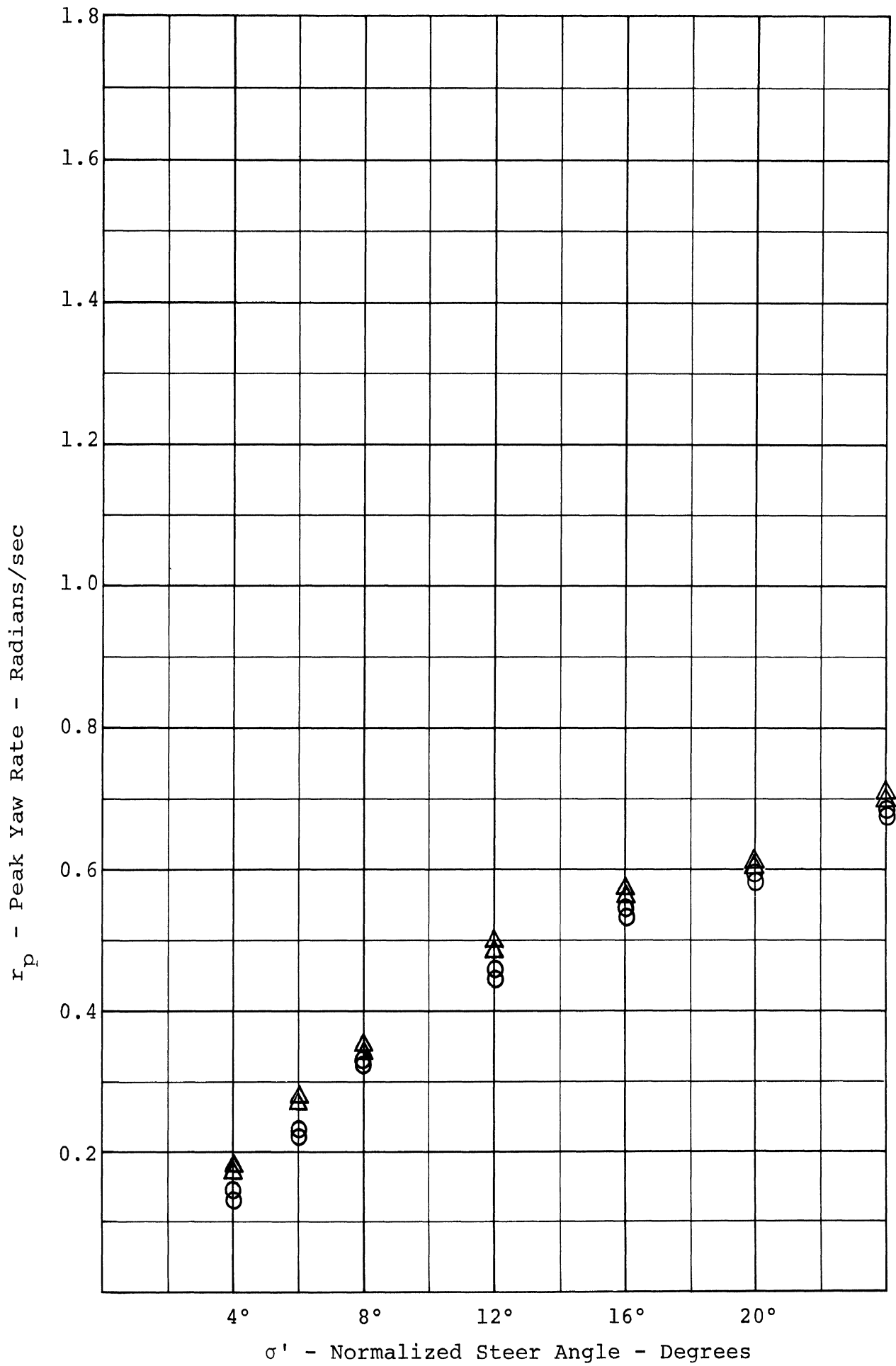
TRAPEZOIDAL STEER - IMPERIAL



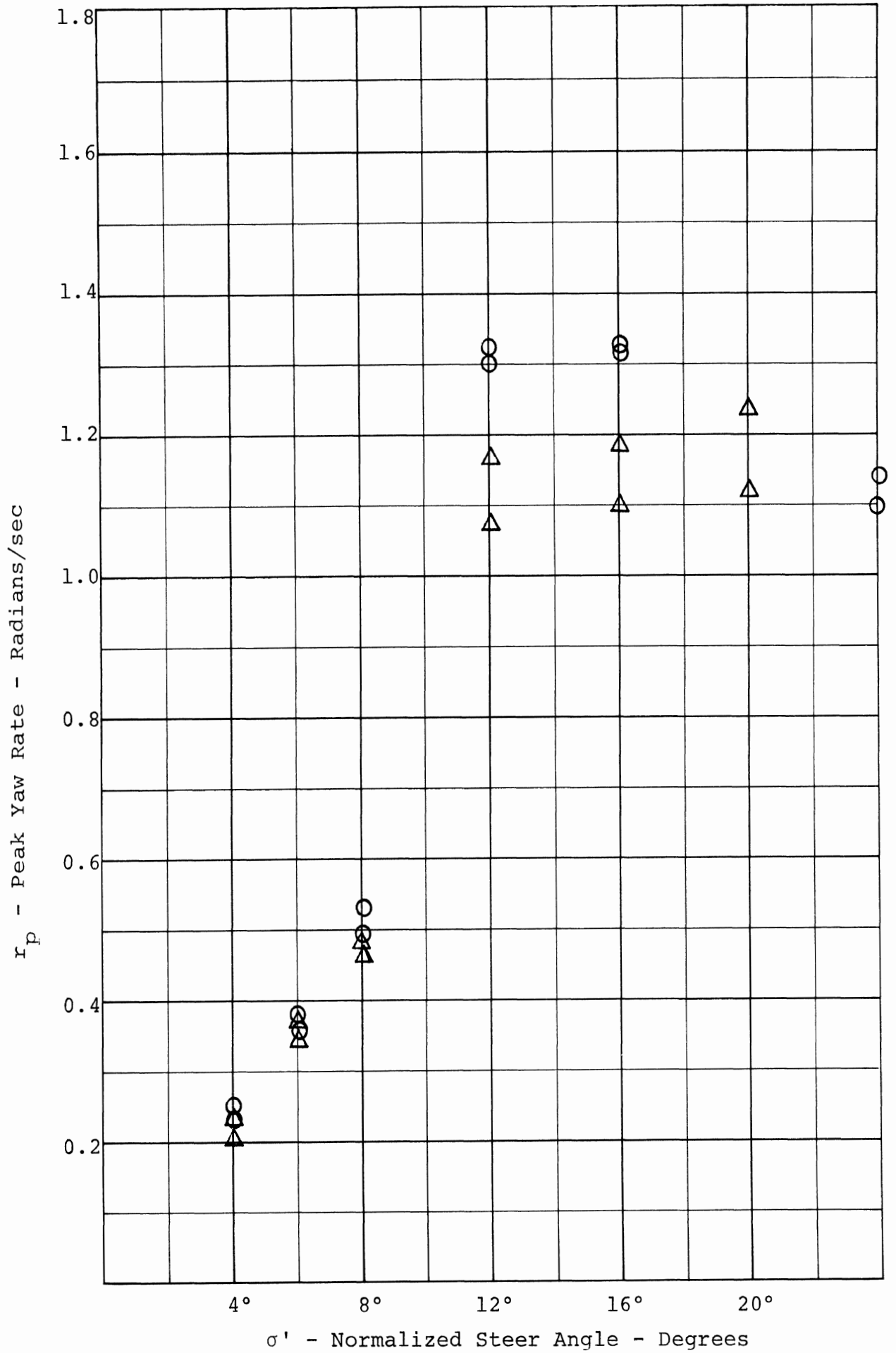
TRAPEZOIDAL STEER - LOTUS



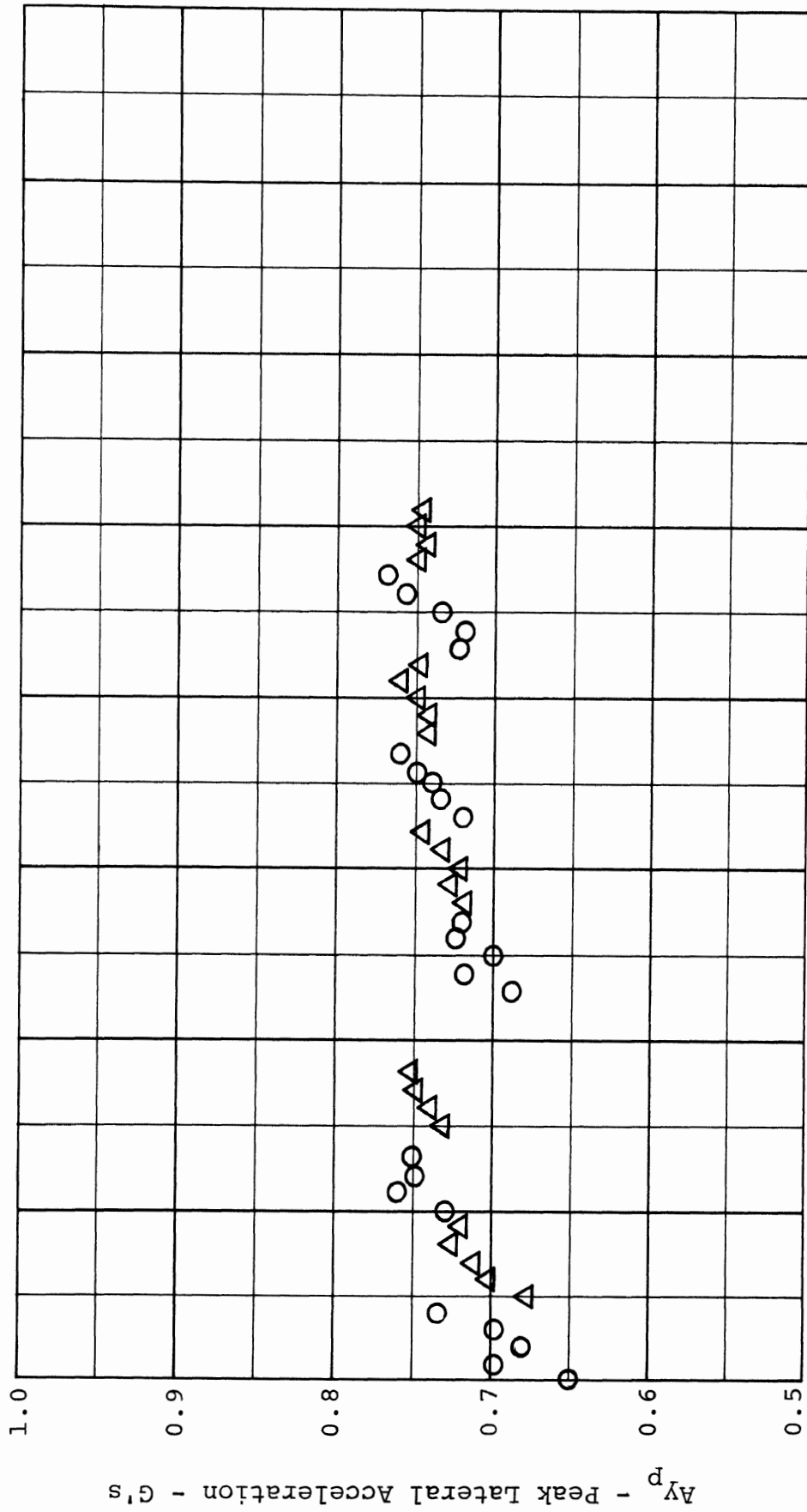
TRAPEZOIDAL STEER - MERCEDES



TRAPEZOIDAL STEER - TORONADO

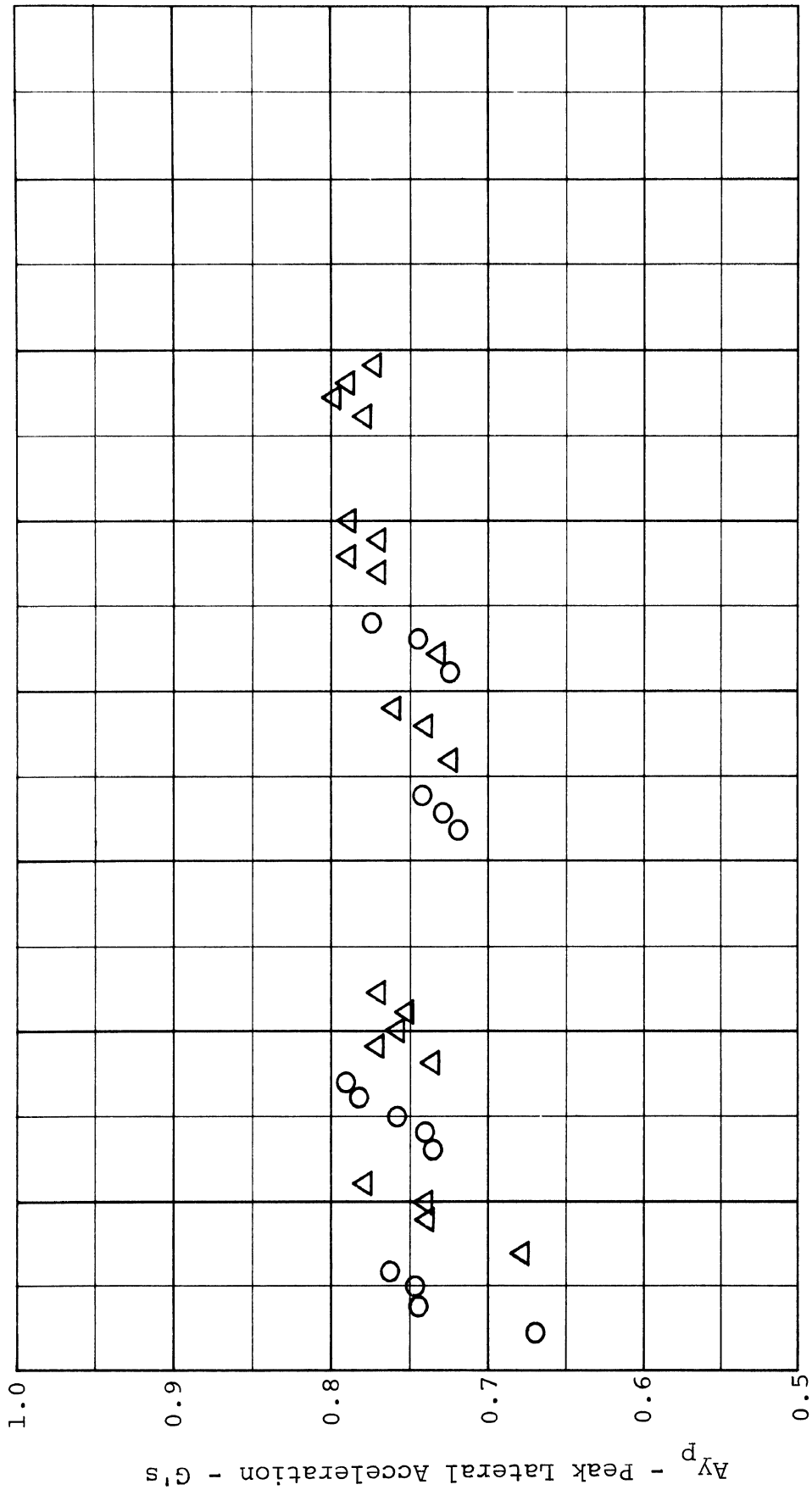


TRAPEZOIDAL STEER - VW



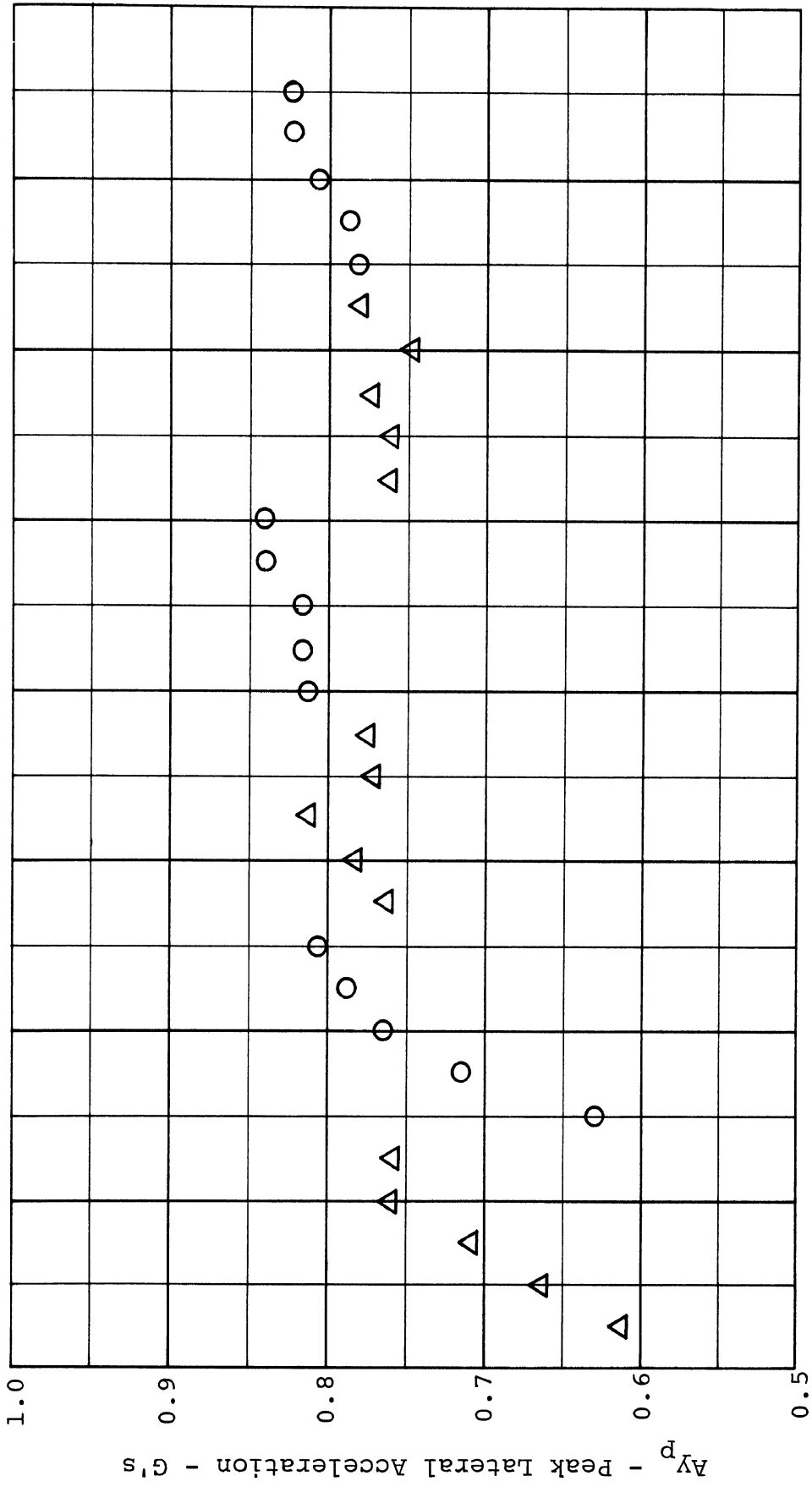
N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - AMBASSADOR



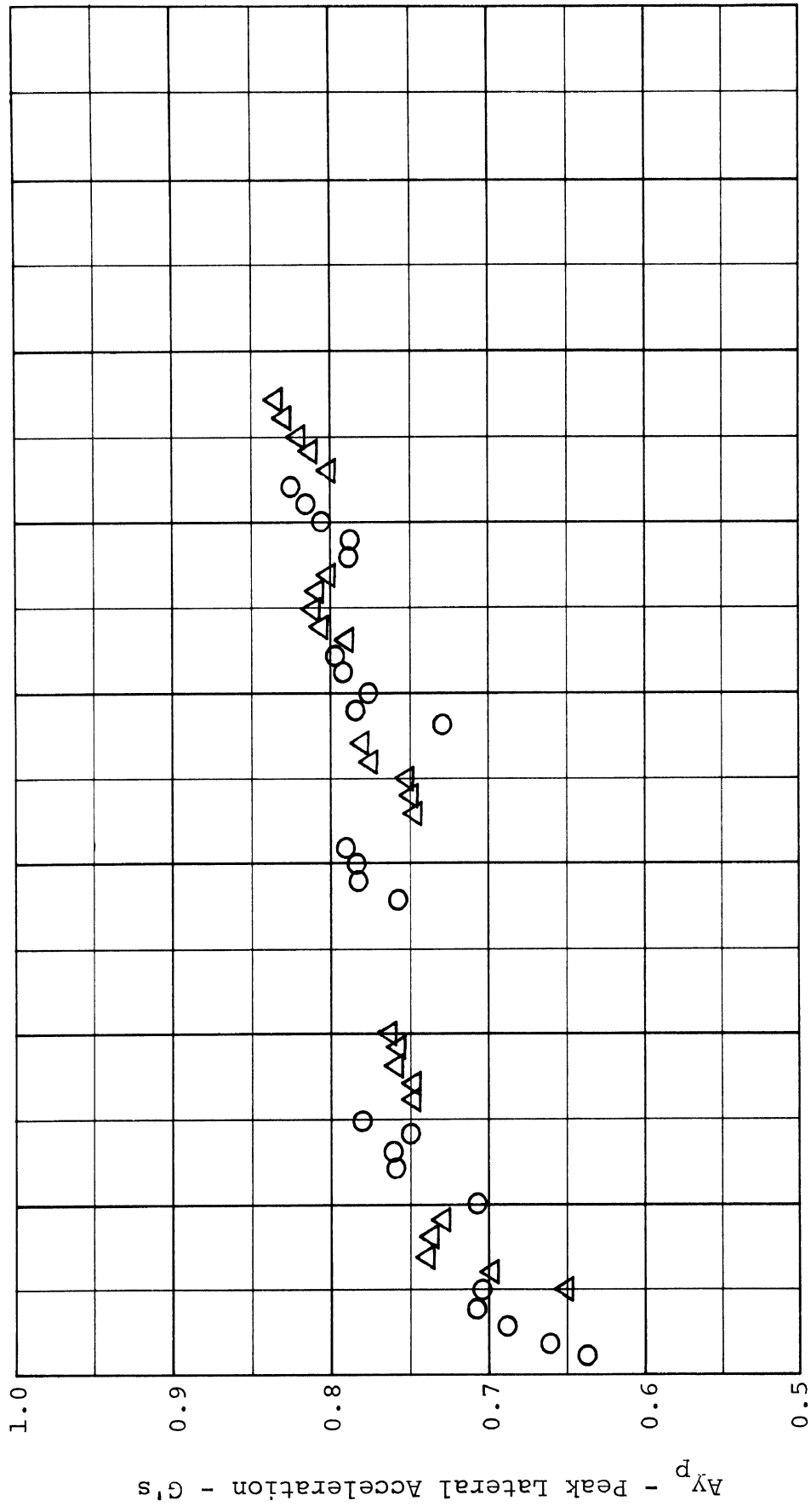
N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - BROOKWOOD

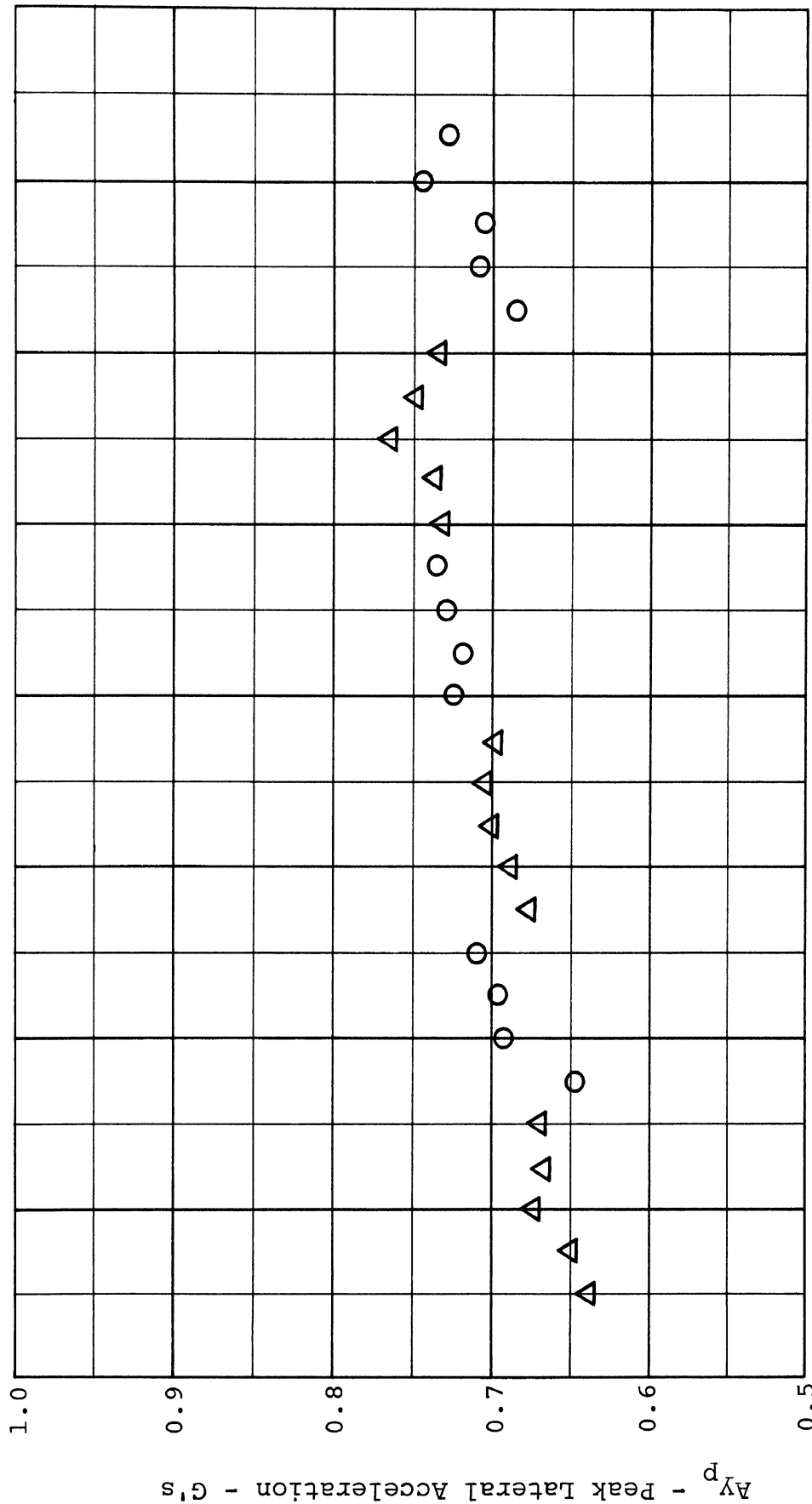


N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - AUSTIN

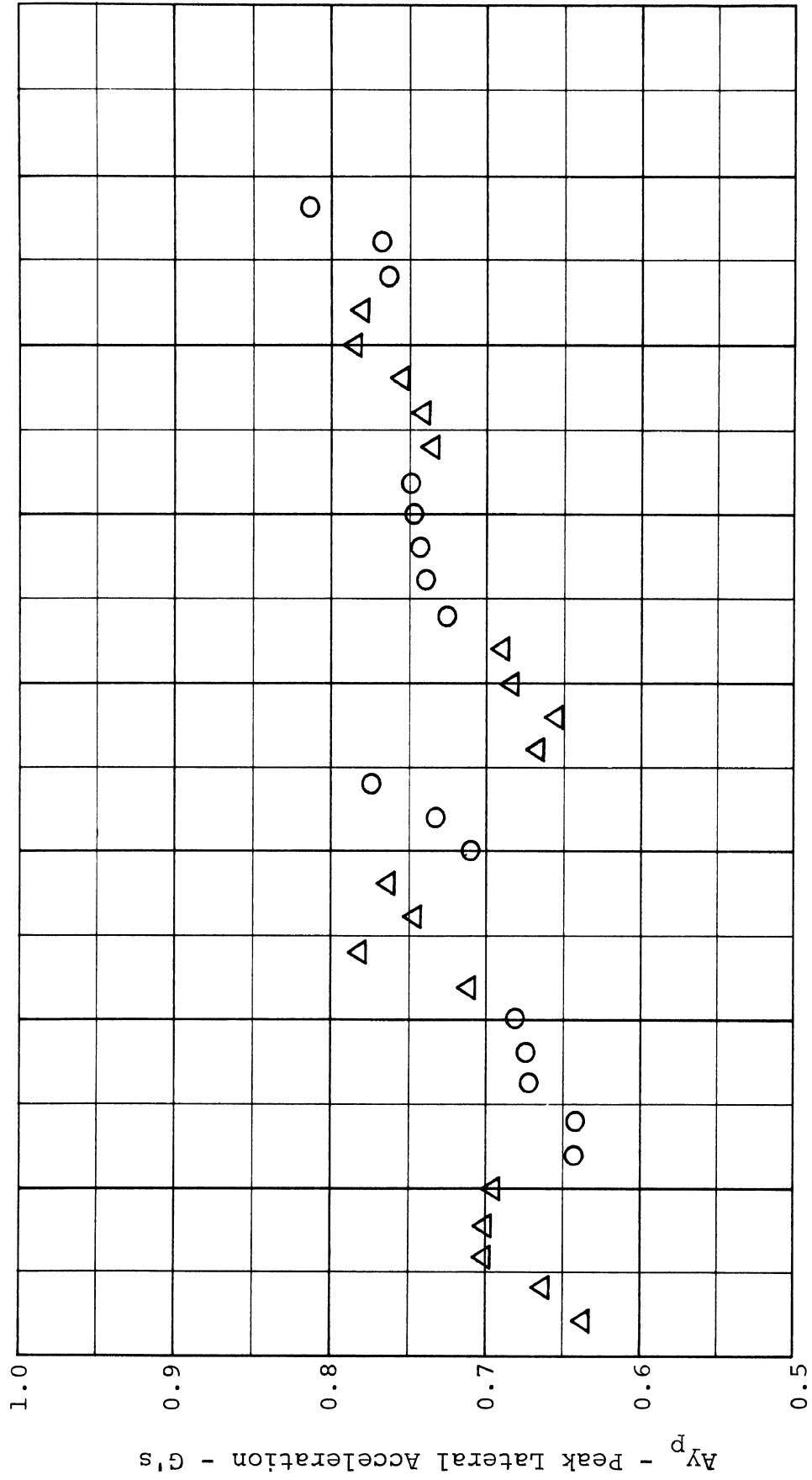


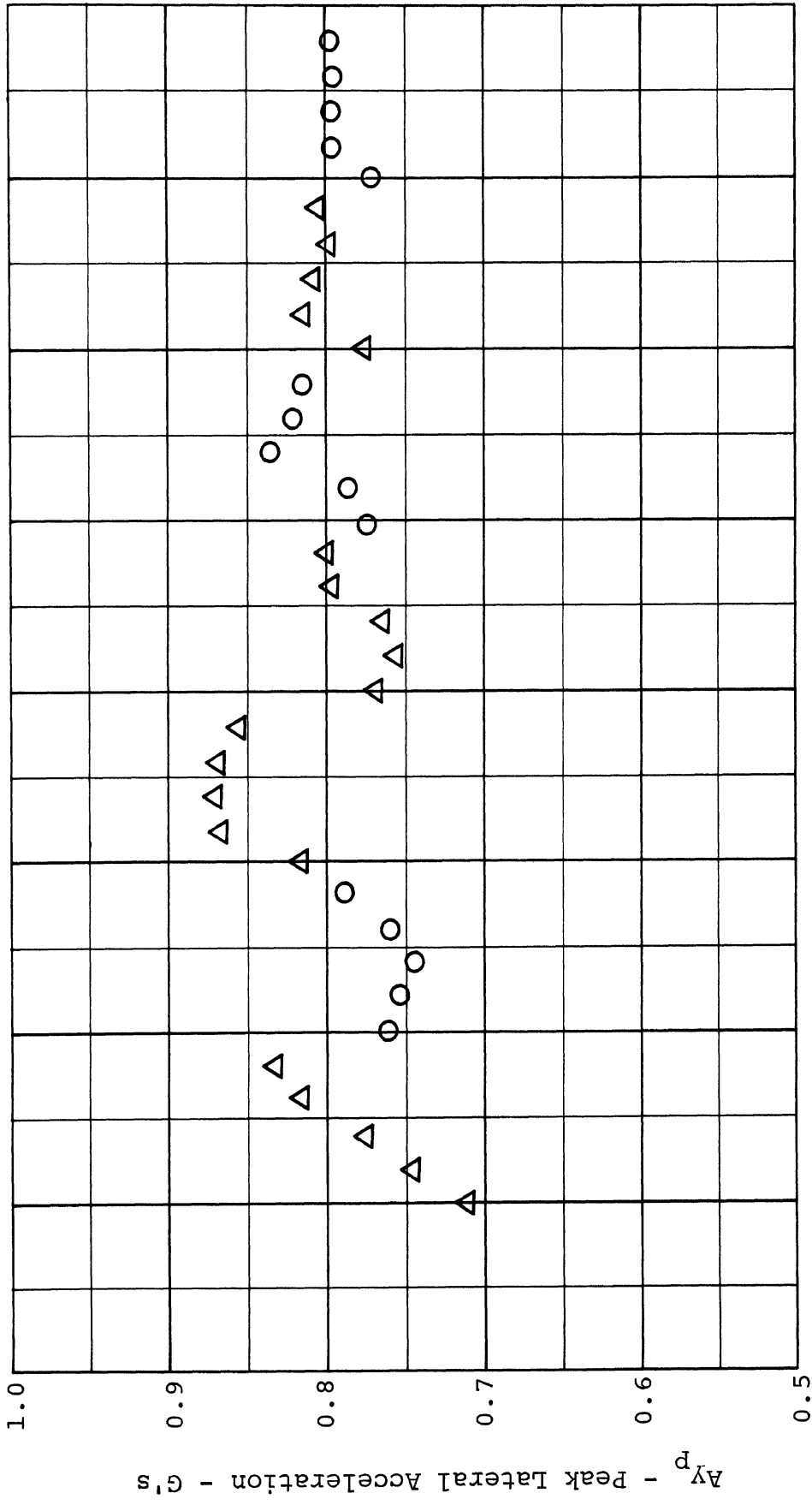
N - Test Runs
 TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - DODGE



N - Test Runs

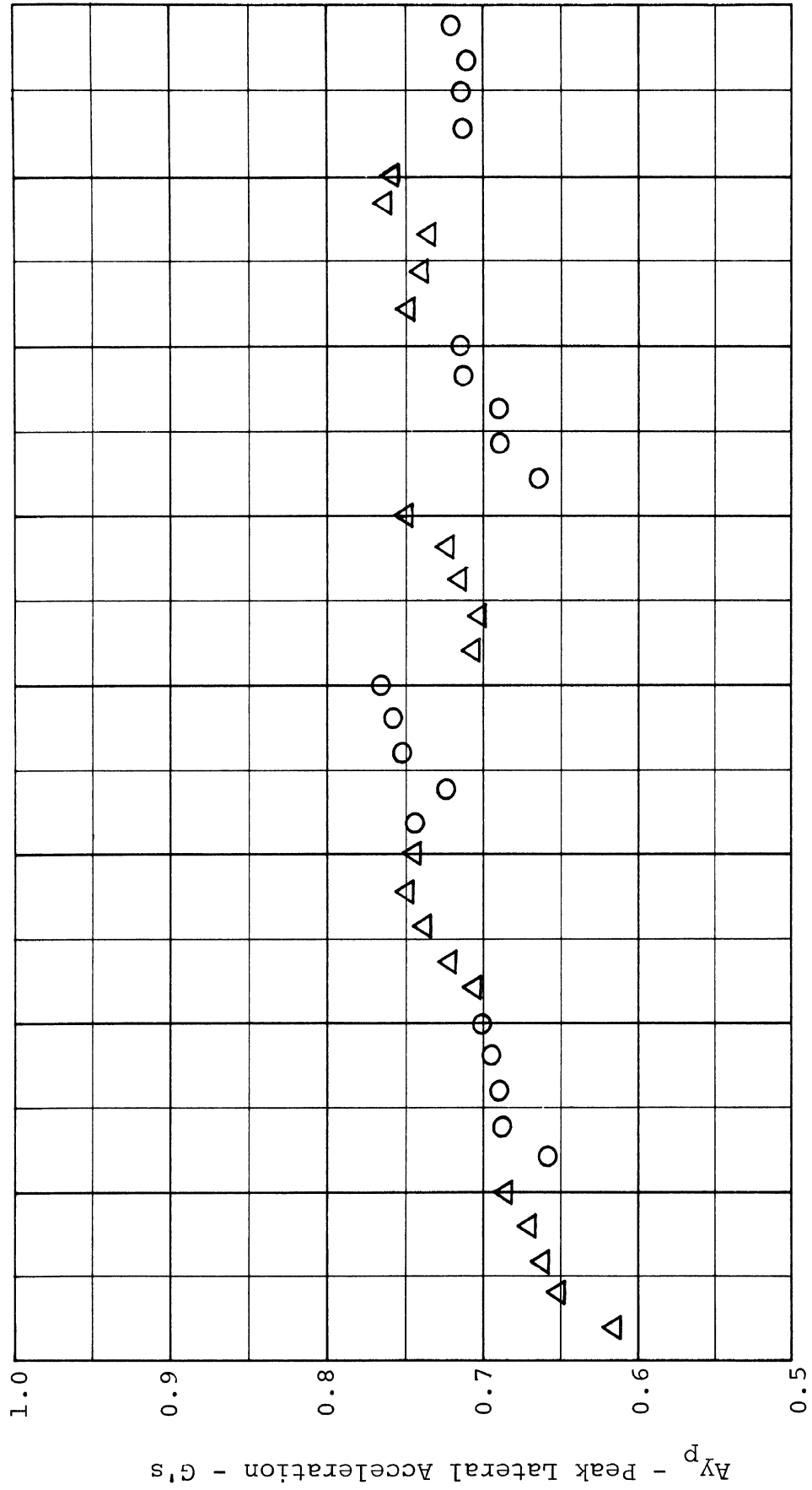
TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - FIREBIRD





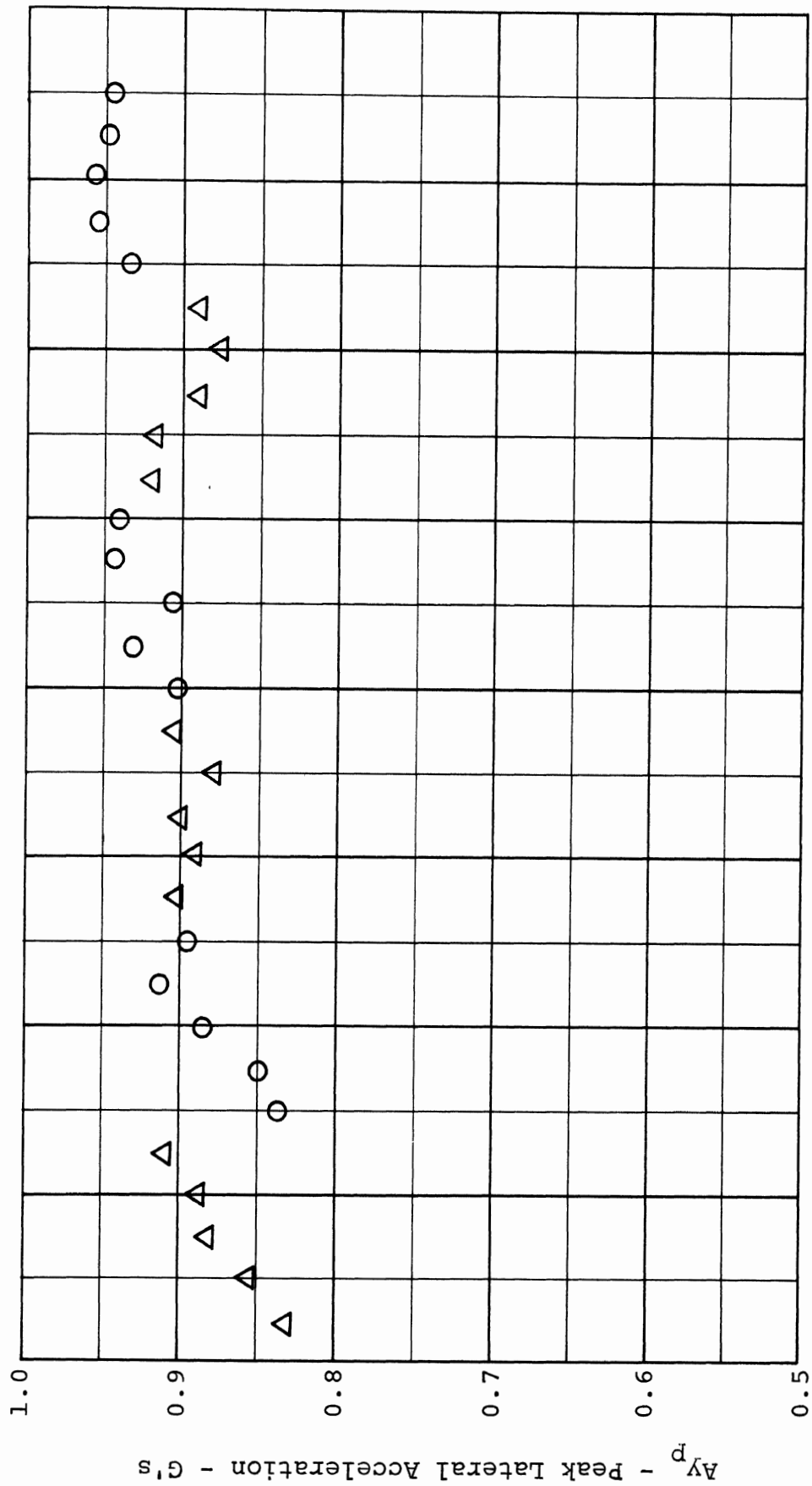
N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - GREMLIN



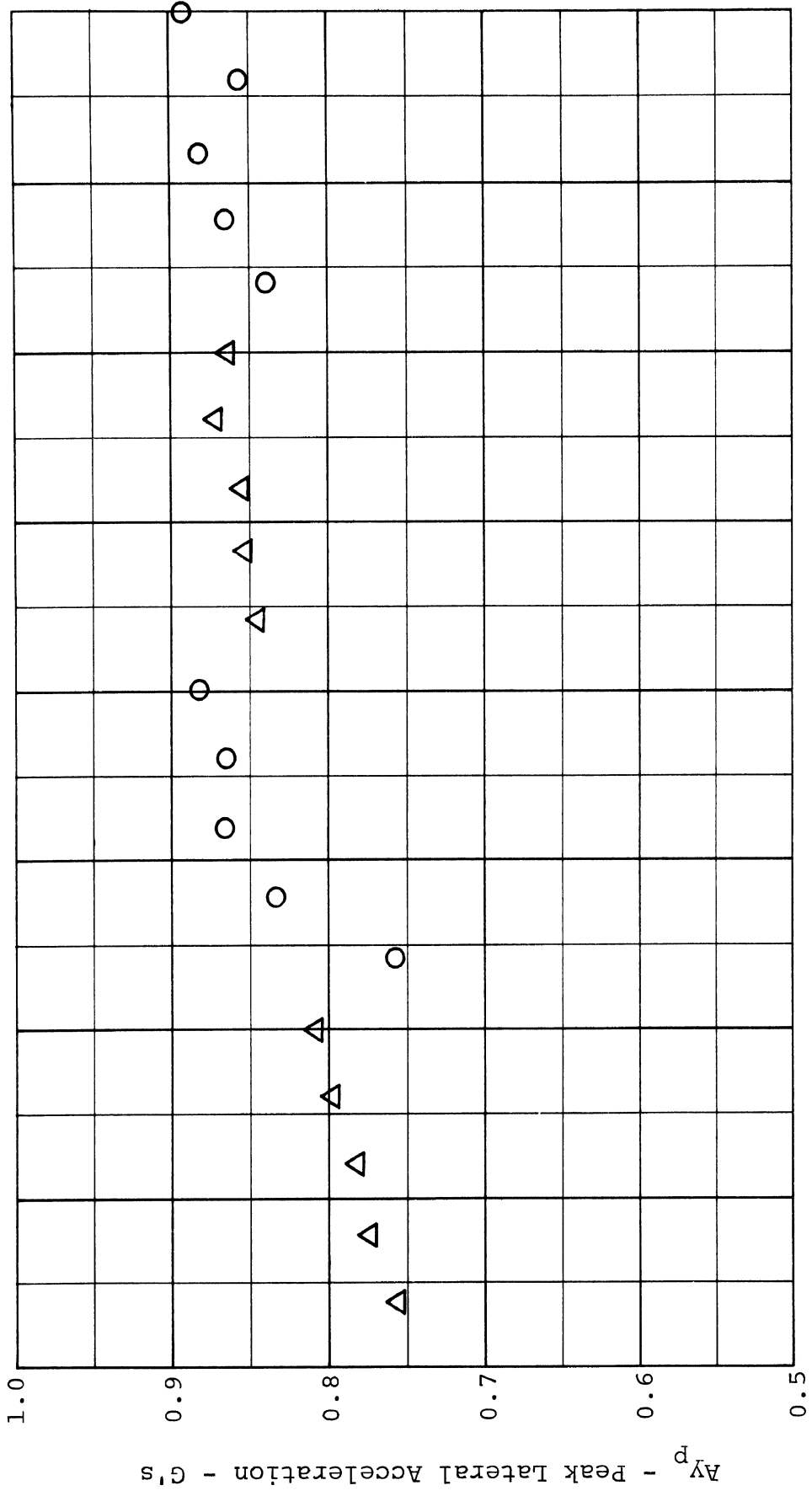
N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - IMPERIAL



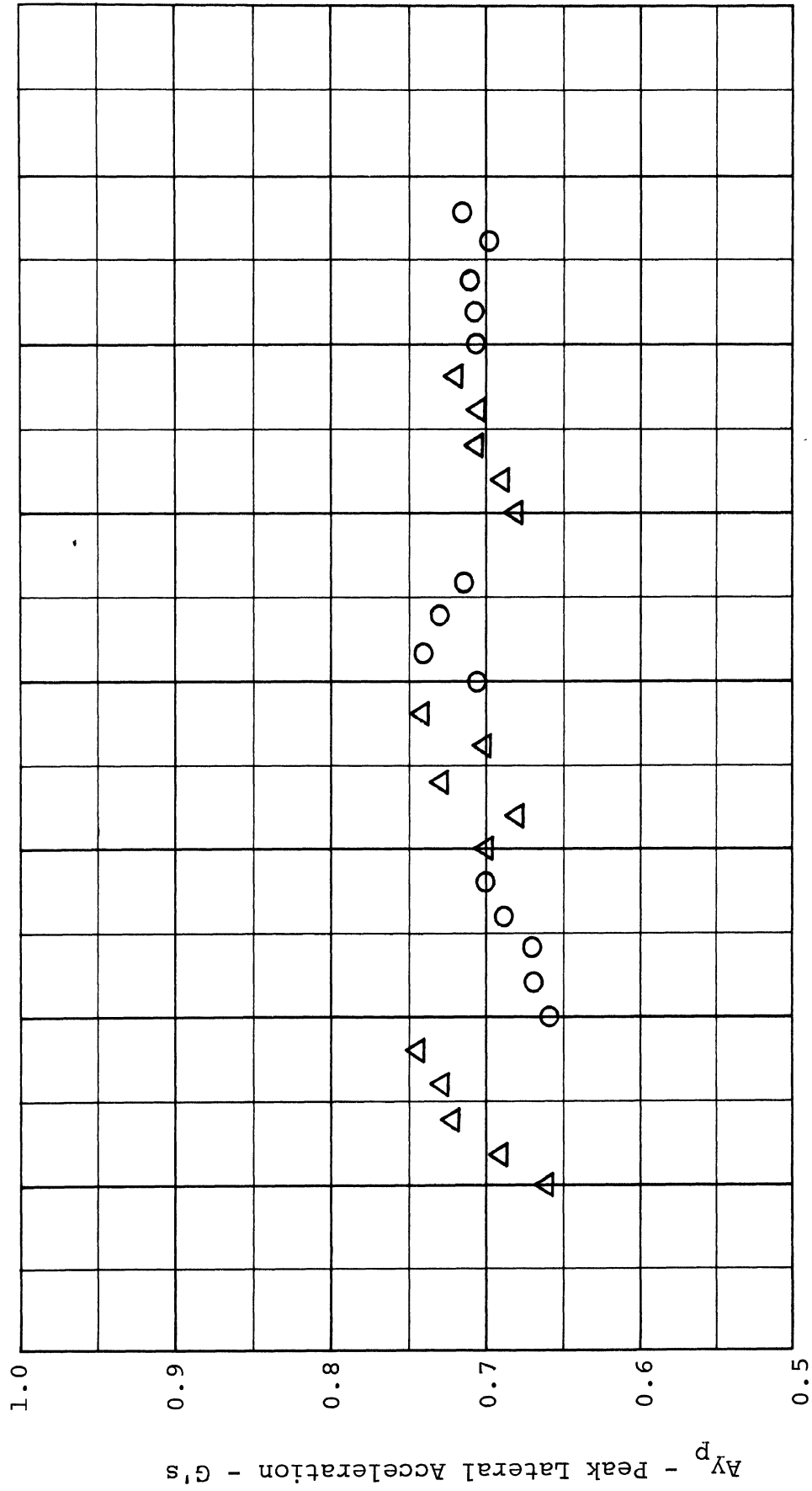
N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - LOTUS



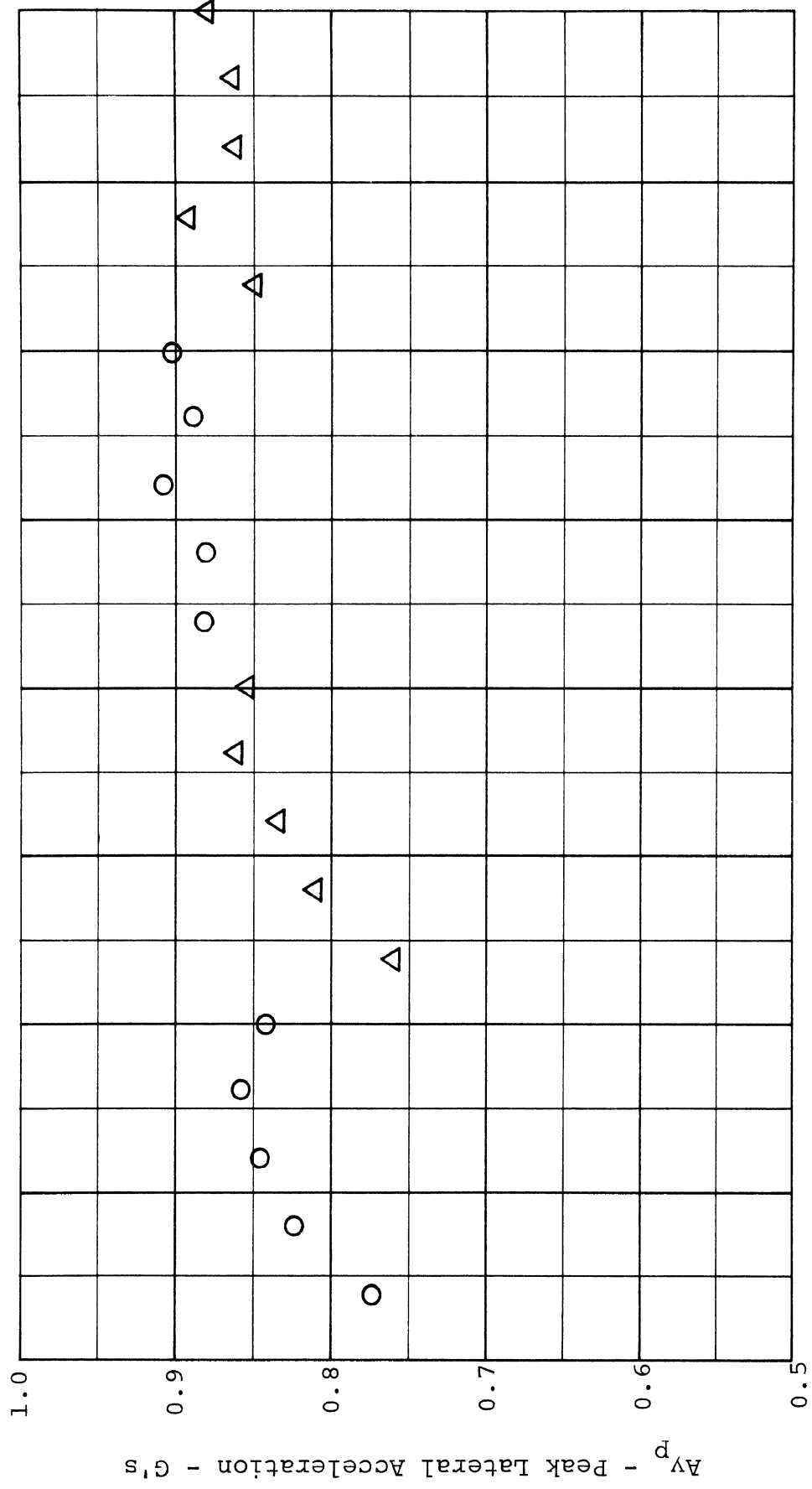
N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - MERCEDES



N - Test Runs

TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - TORONADO

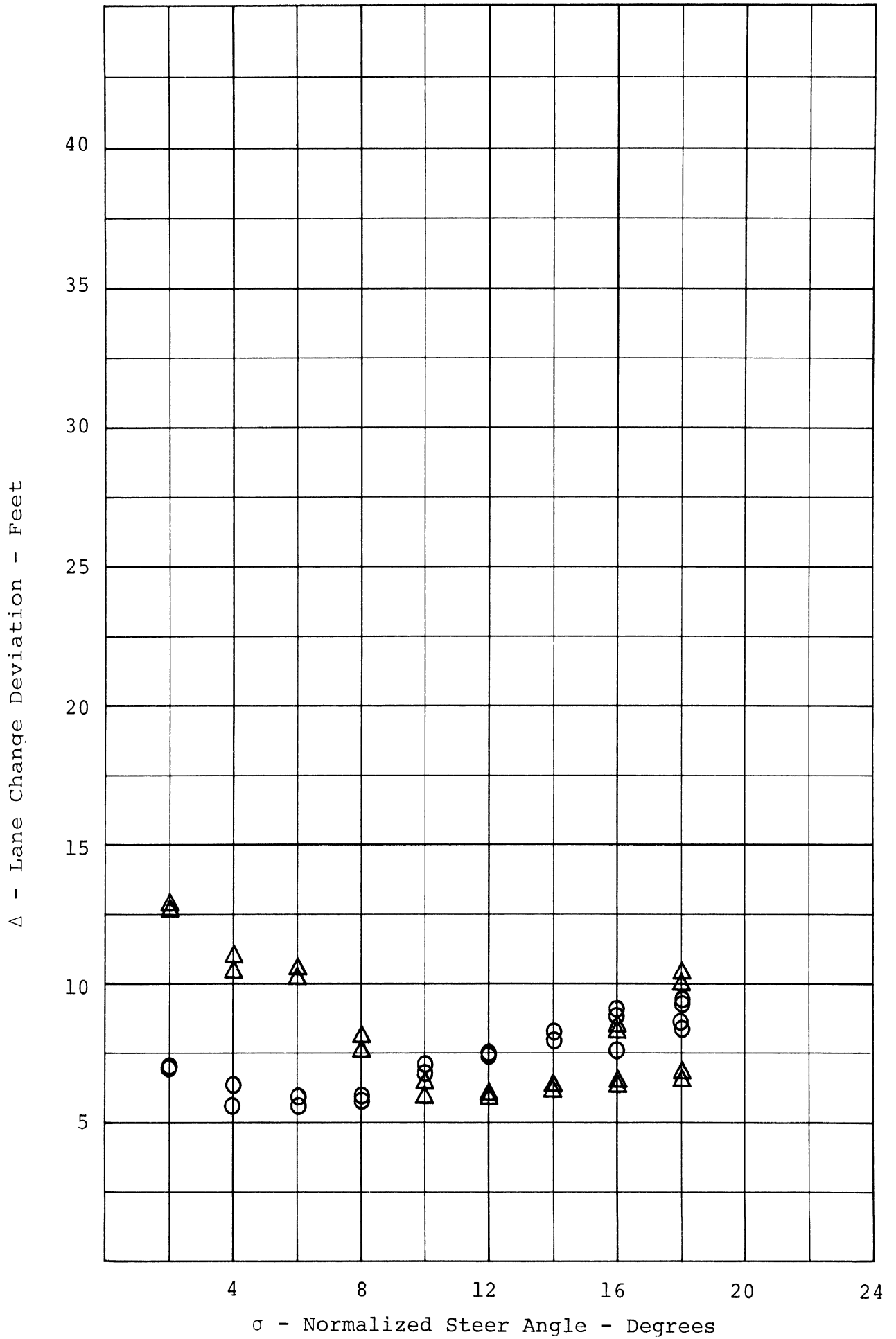


N - Test Runs

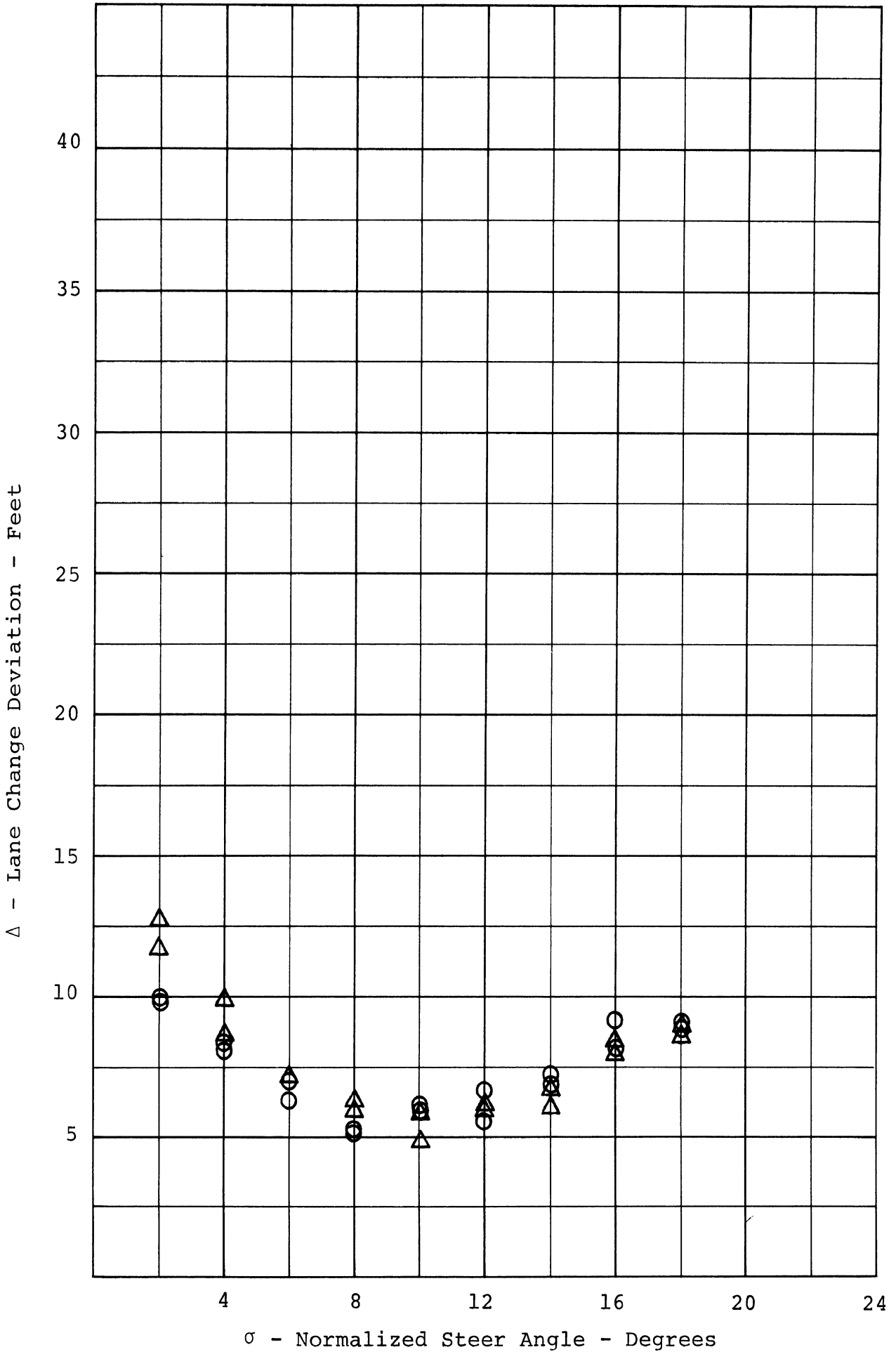
TRAPEZOIDAL STEER - TIRE BREAK-IN DATA - VW

VHTP #5 - SINUSOIDAL STEER

- $\Delta\psi$ - Vehicle Heading Angle Deviation After 3.4 Seconds
- σ - Normalized Steer Angle, or Nominal Front Wheel Steer Angle
- Δ - Lane Change Deviation from "Ideal" Lane Change Displacement
- β_p - Peak Sideslip Angle
- Δ - Indicates Sine Steer Input is of "Initially Left" polarity
- \circ - Indicates Sine Steer Input is of "Initially Right" polarity

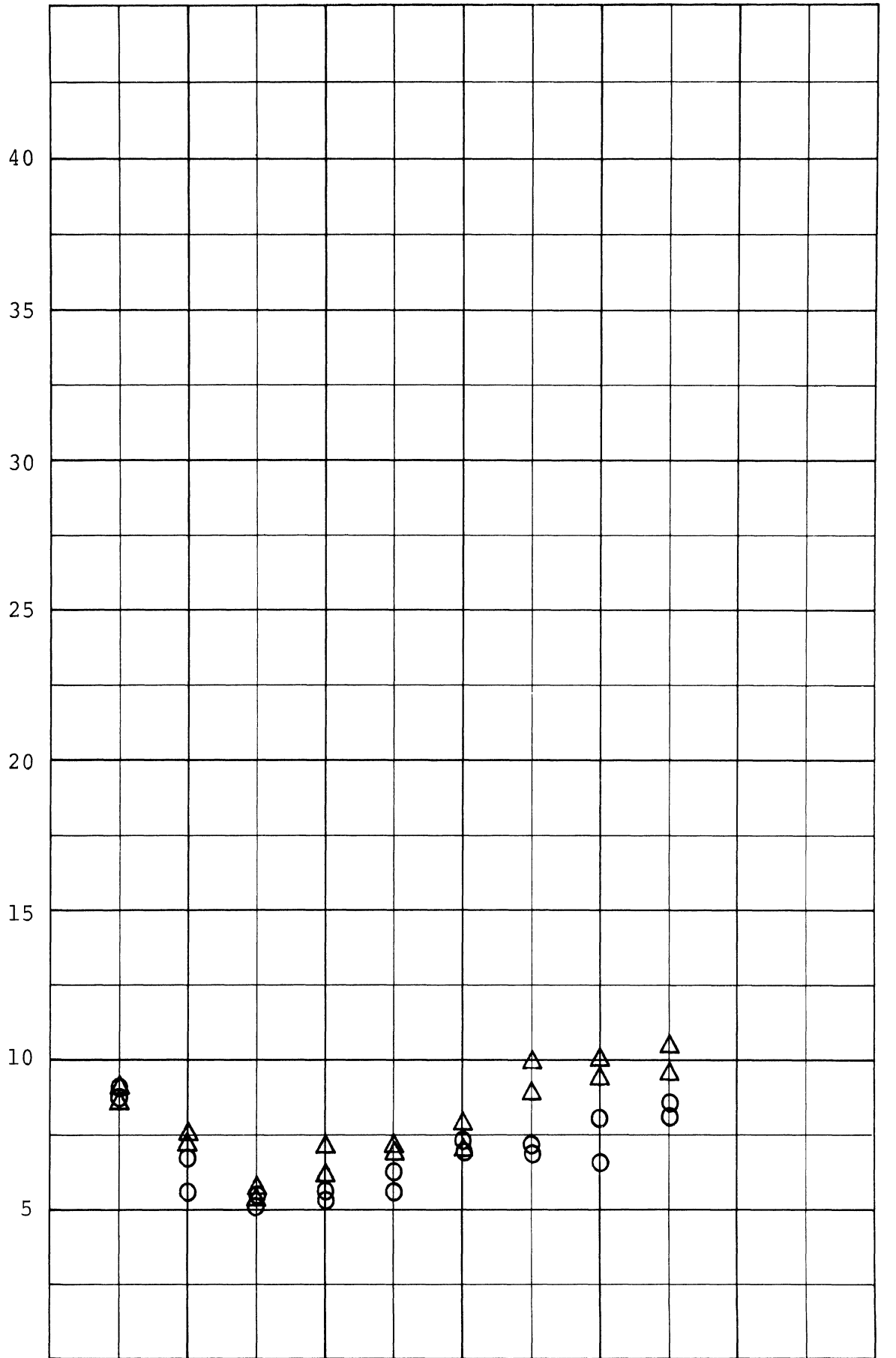


SINUSOIDAL STEER - 45 MPH - AMBASSADOR



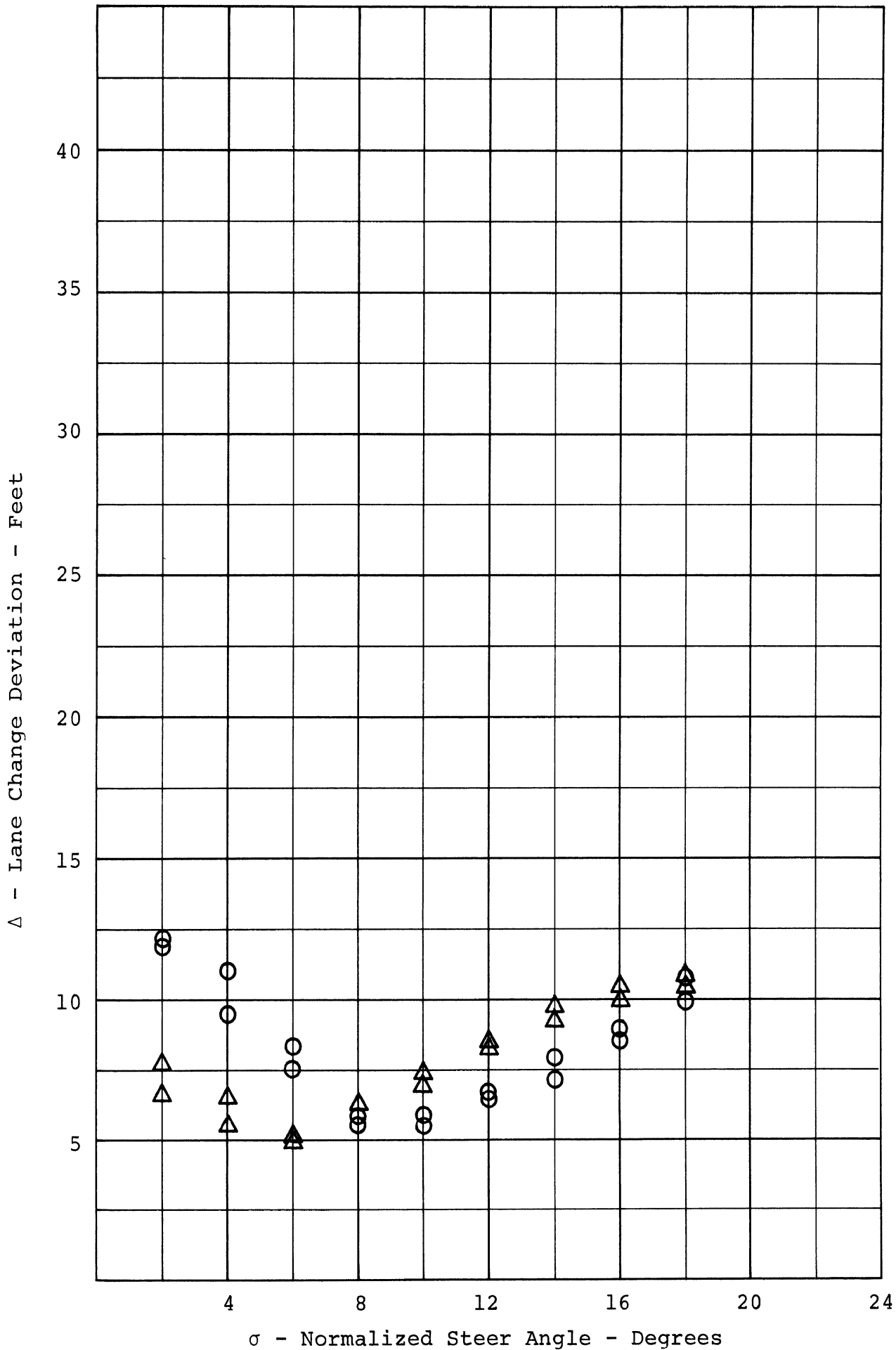
SINUSOIDAL STEER - 45 MPH - AUSTIN

Δ - Lane Change Deviation - Feet

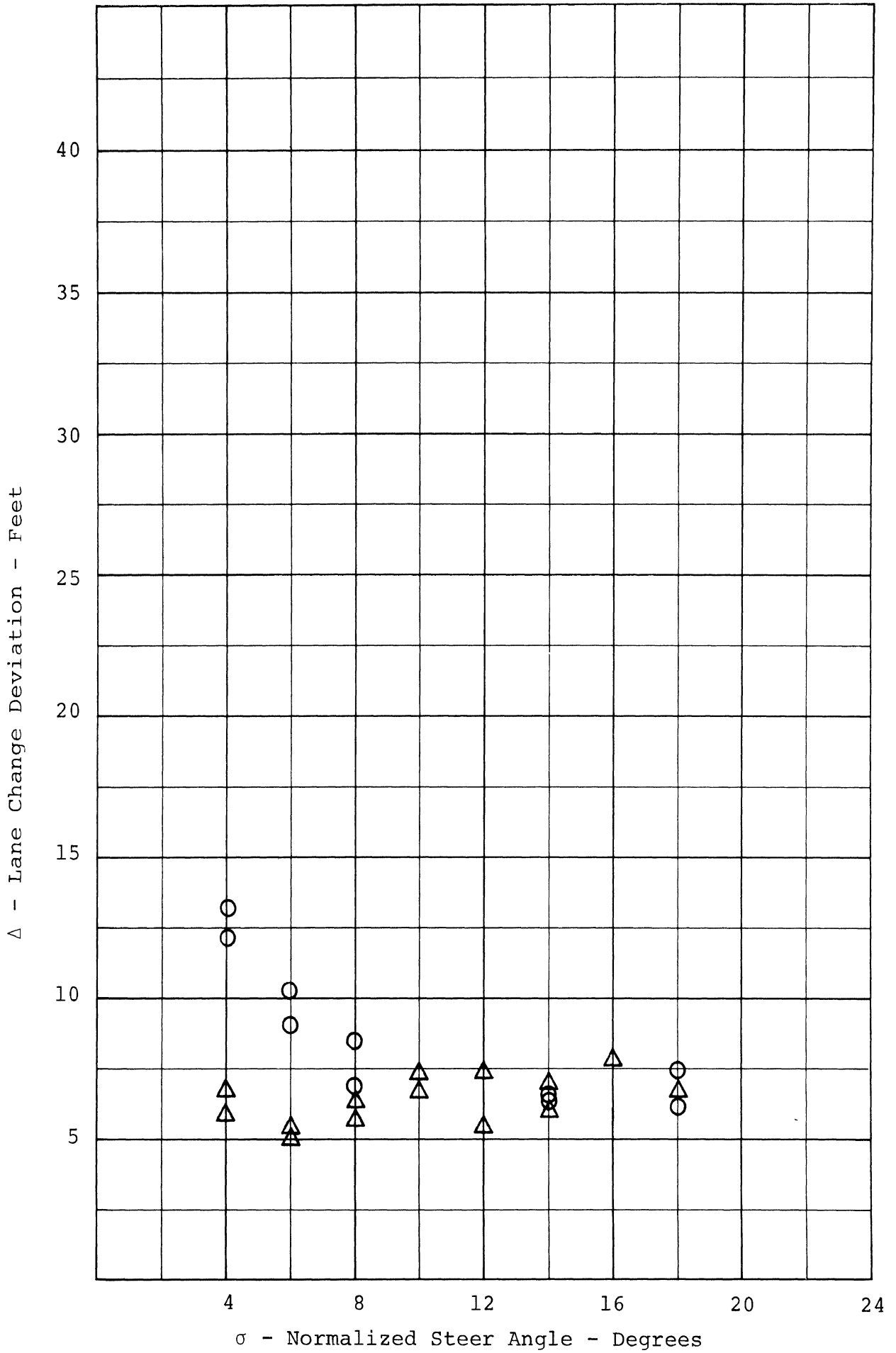


σ - Normalized Steer Angle - Degrees

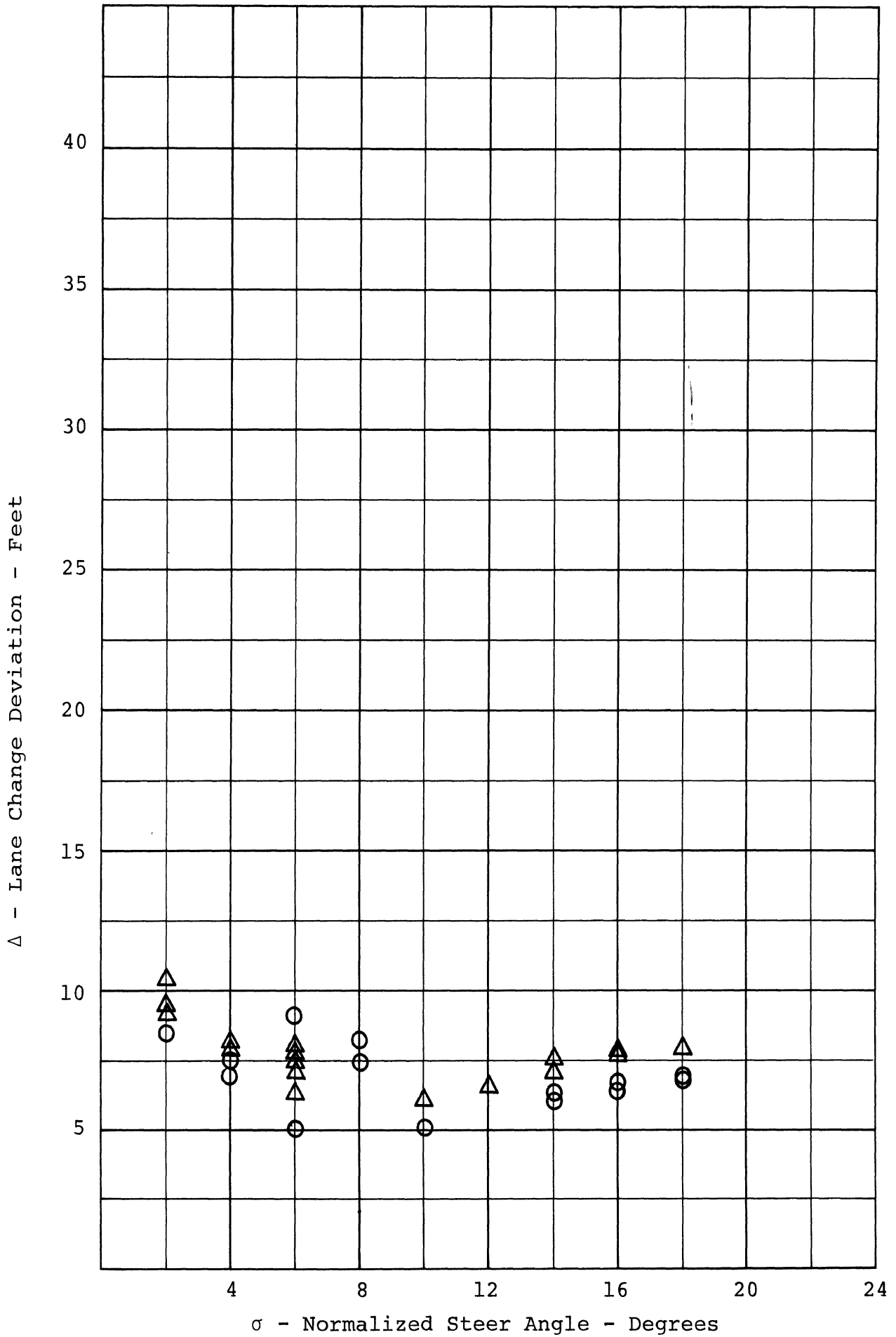
SINUSOIDAL STEER - 45 MPH - BROOKWOOD



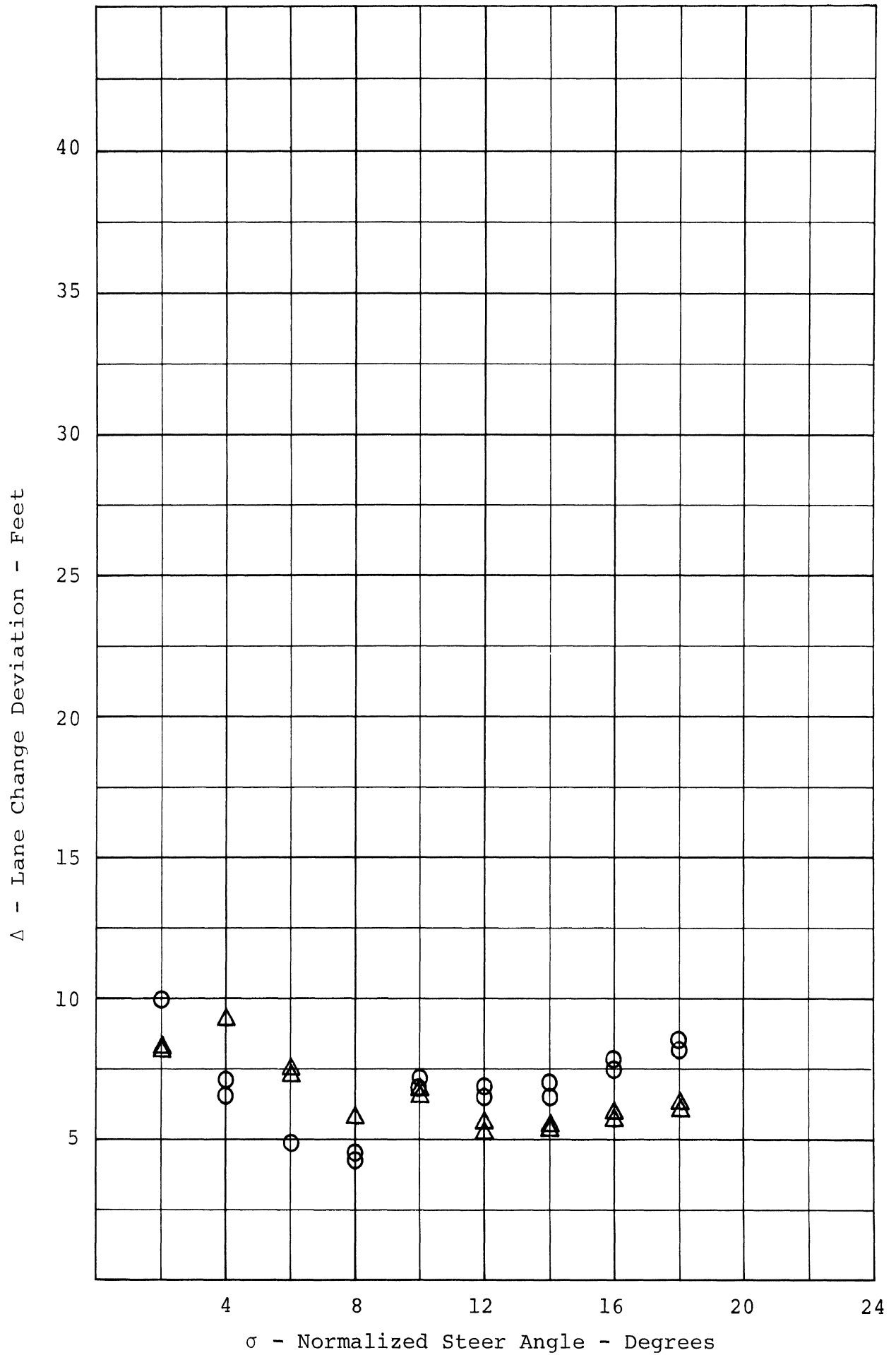
SINUSOIDAL STEER - 45 MPH - DODGE



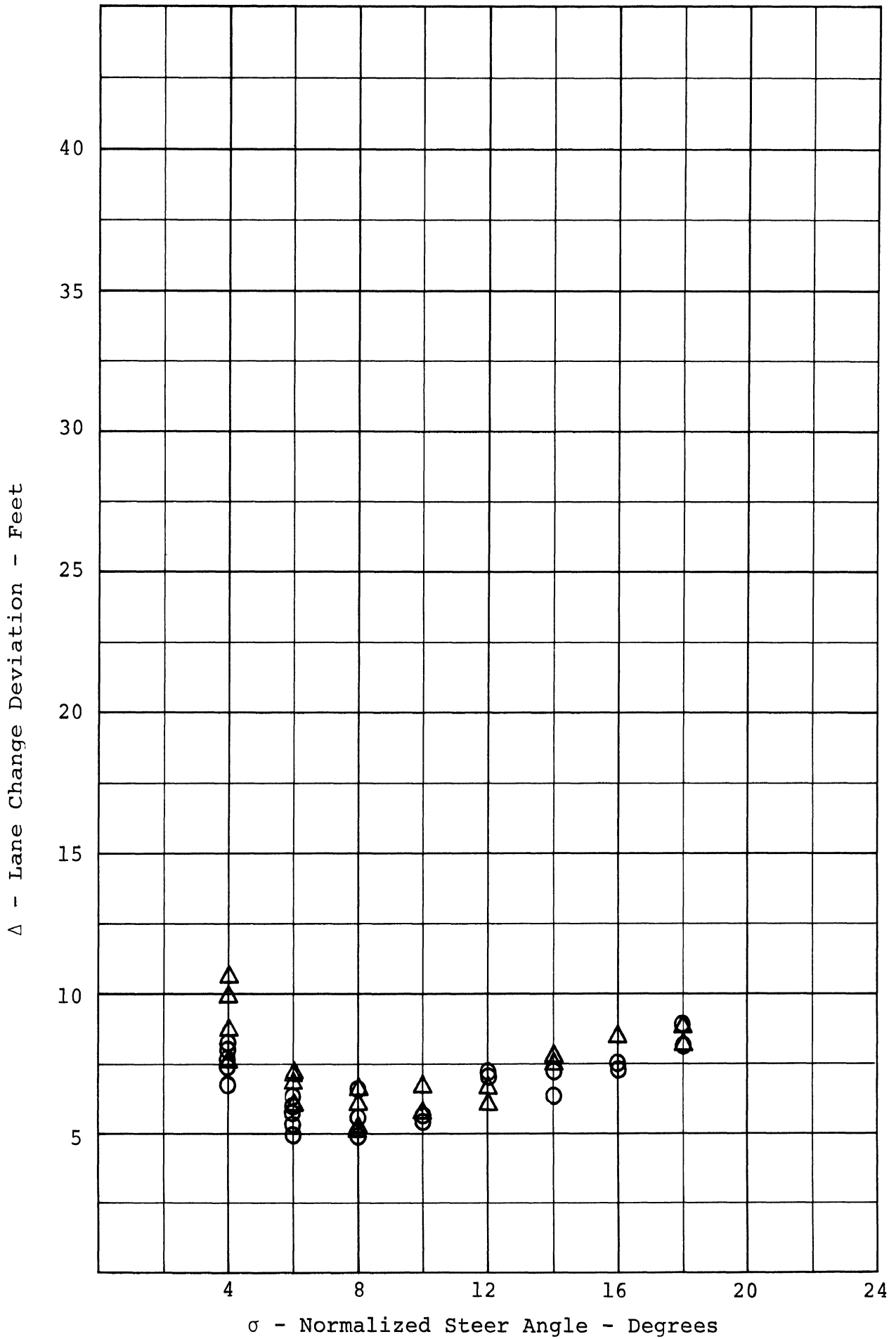
SINUSOIDAL STEER - 45 MPH - FIREBIRD



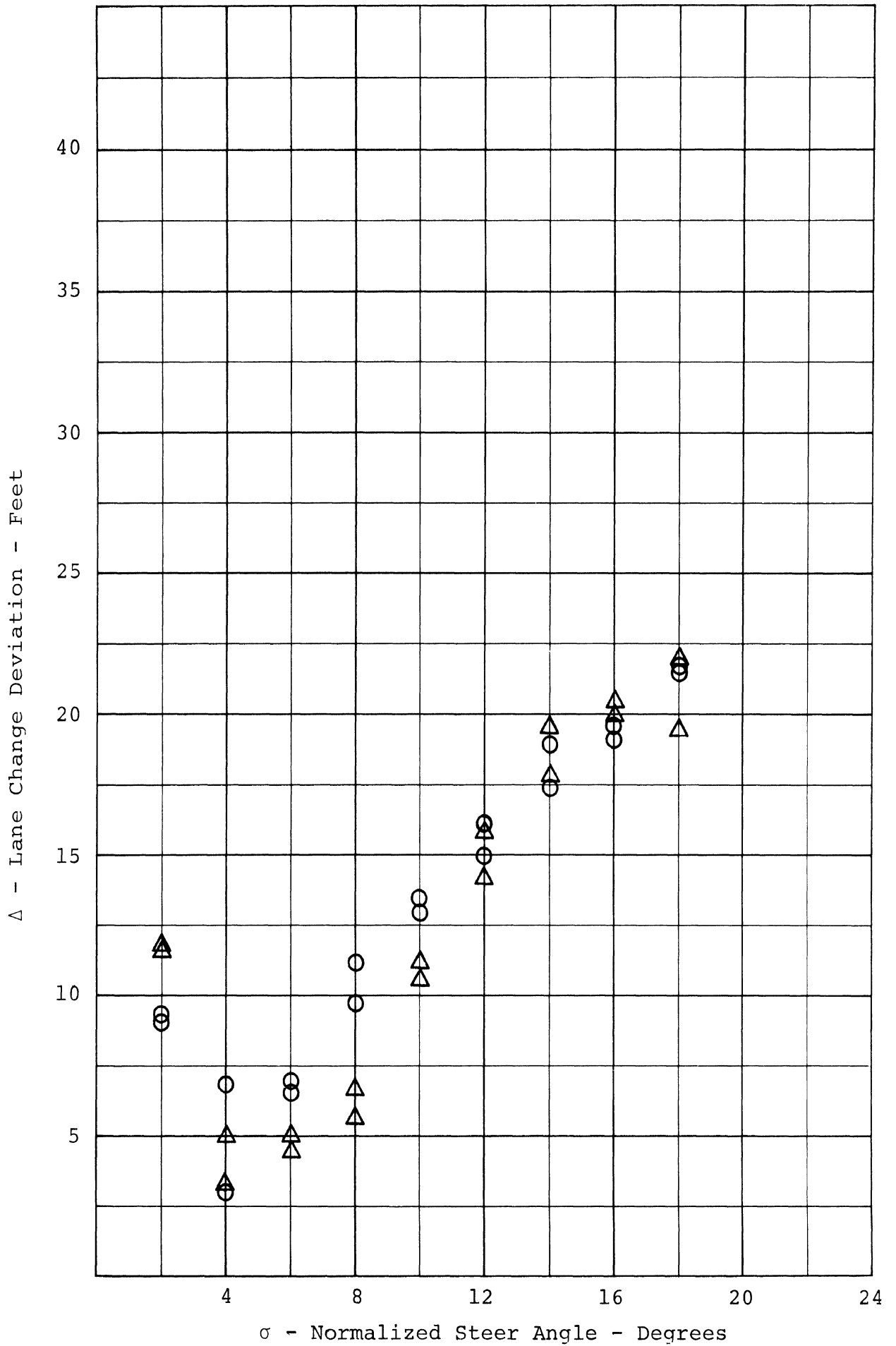
SINUSOIDAL STEER - 45 MPH - GALAXIE



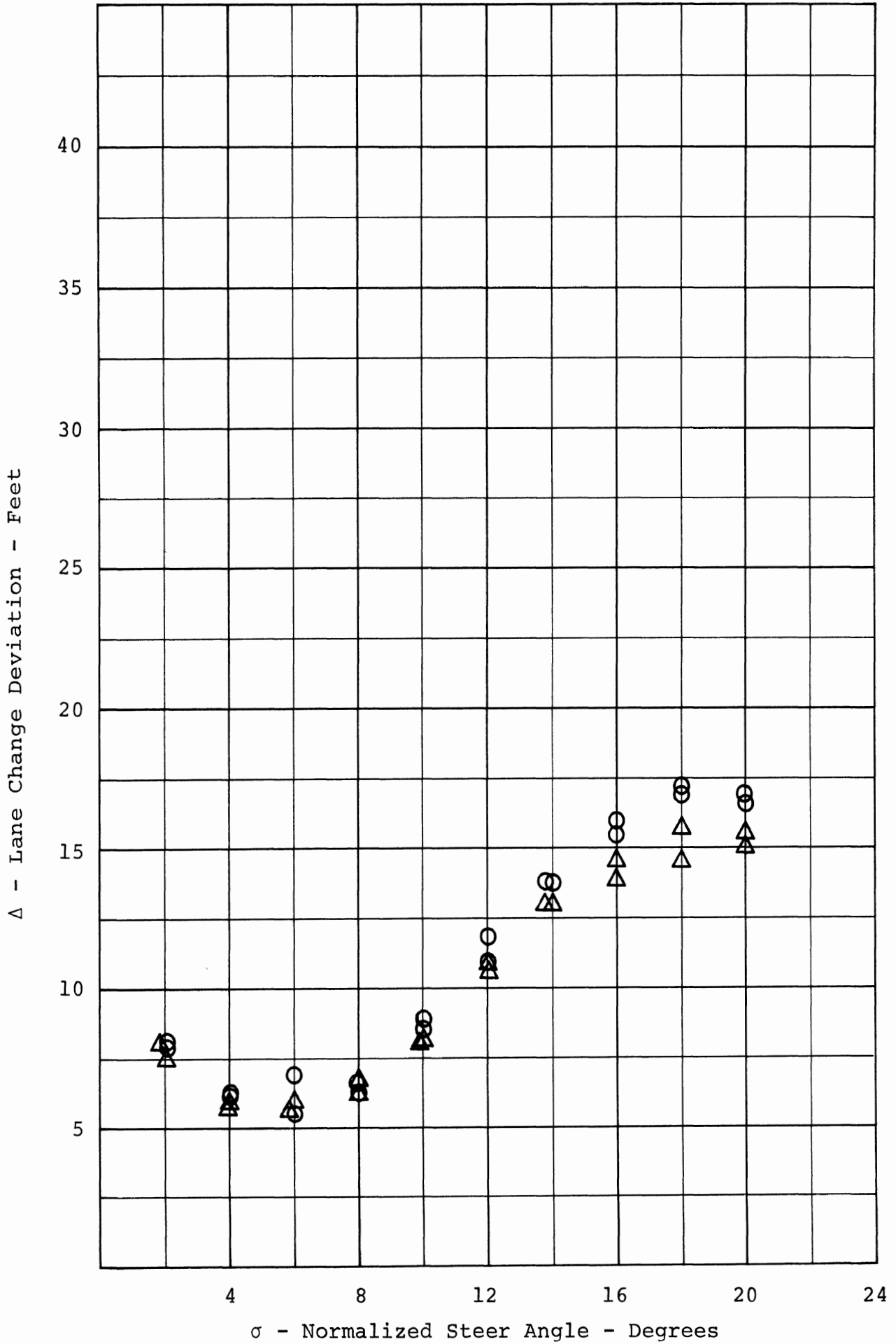
SINUSOIDAL STEER - 45 MPH - GREMLIN



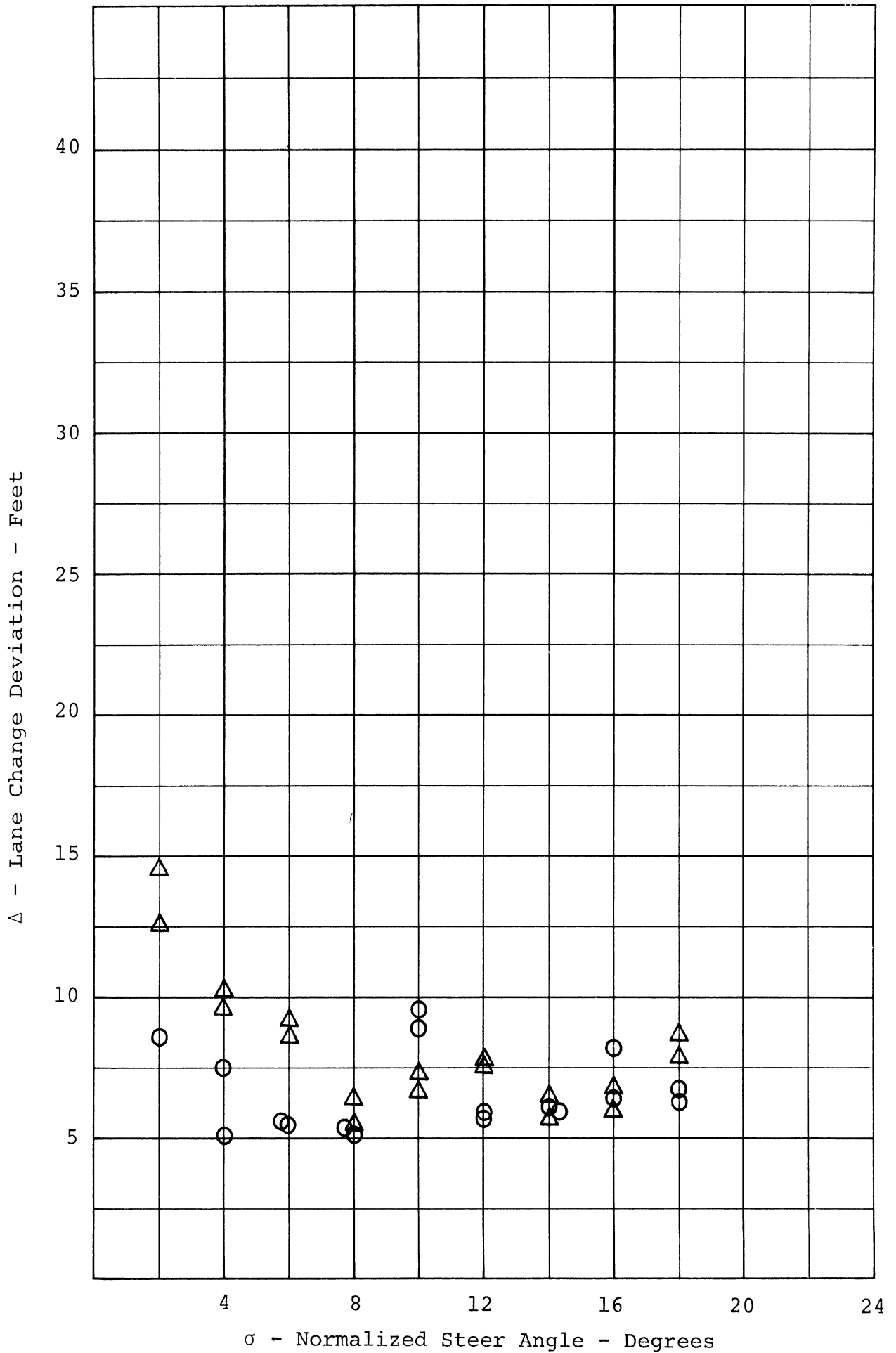
SINUSOIDAL STEER - 45 MPH - IMPERIAL



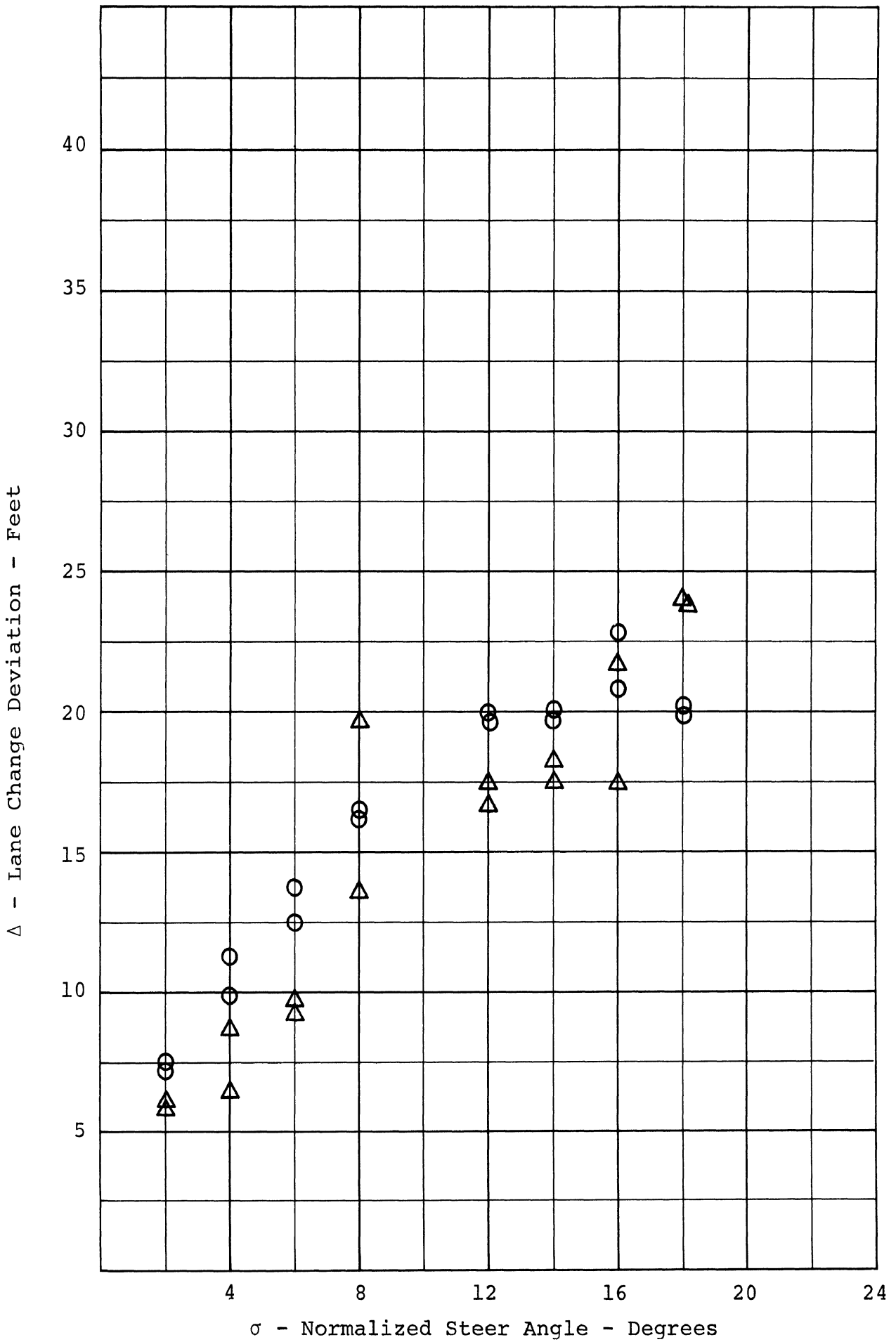
SINUSOIDAL STEER - 45 MPH - LOTUS



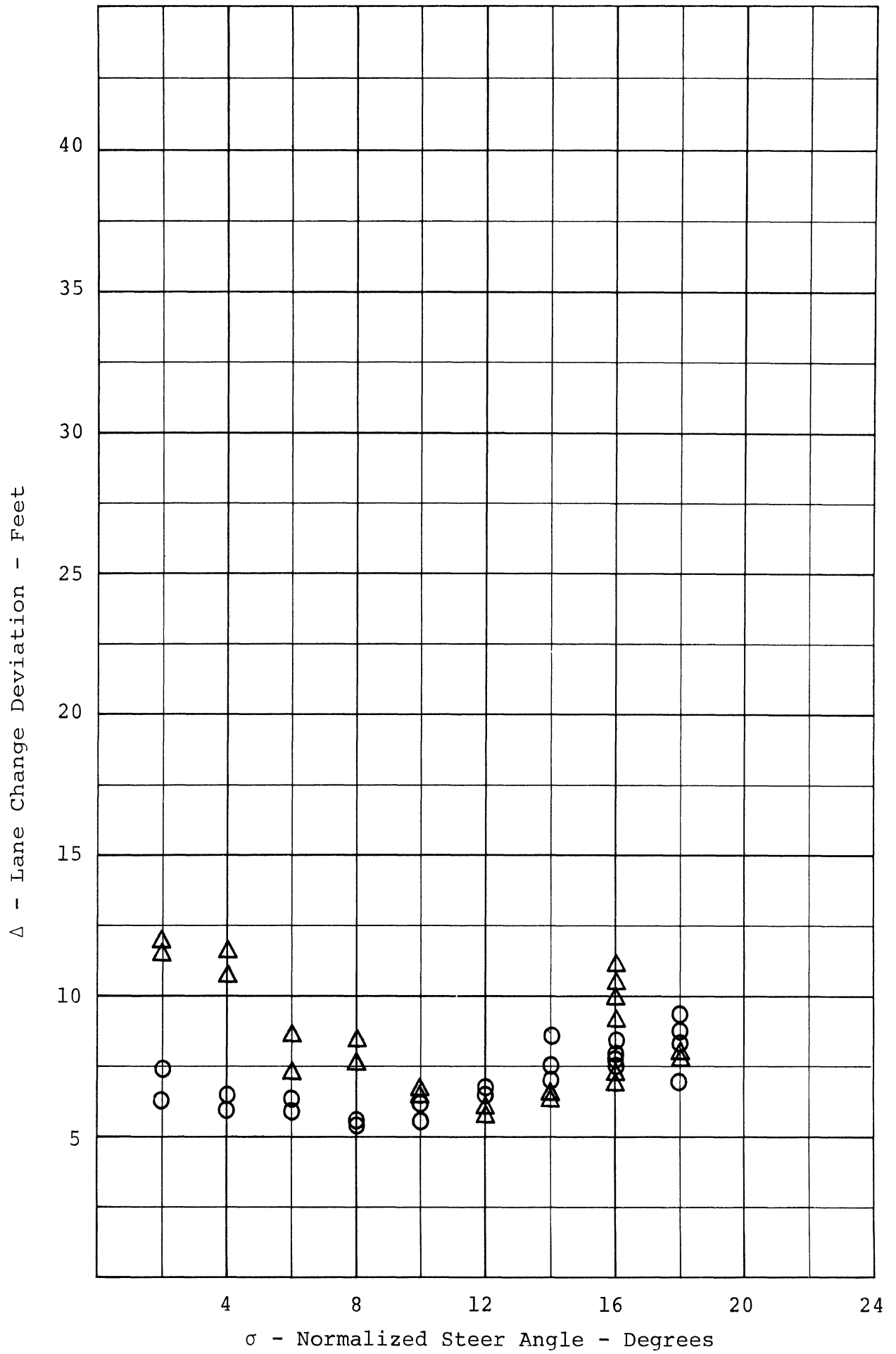
SINUSOIDAL STEER - 45 MPH - MERCEDES



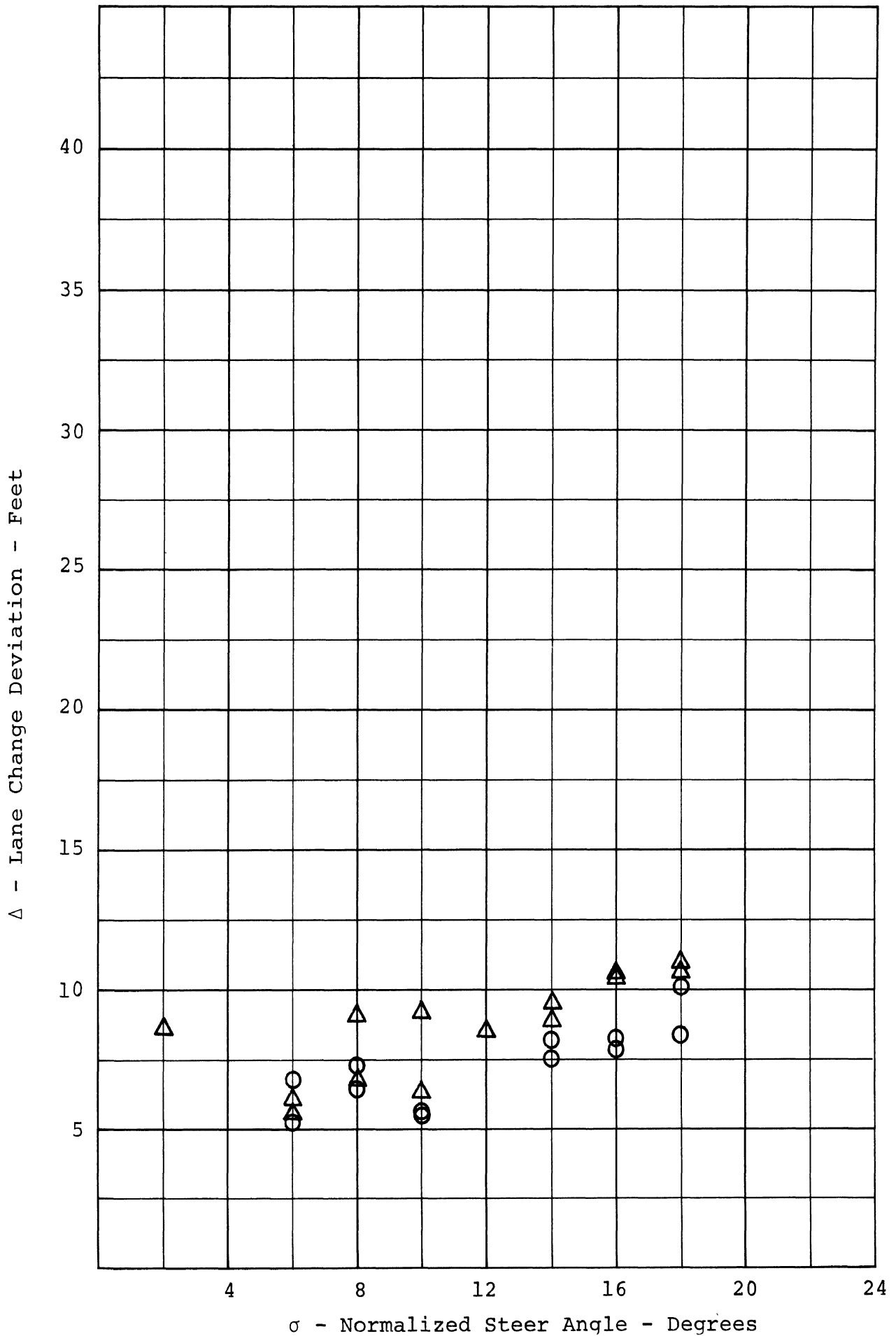
SINUSOIDAL STEER - 45 MPH - TORONADO



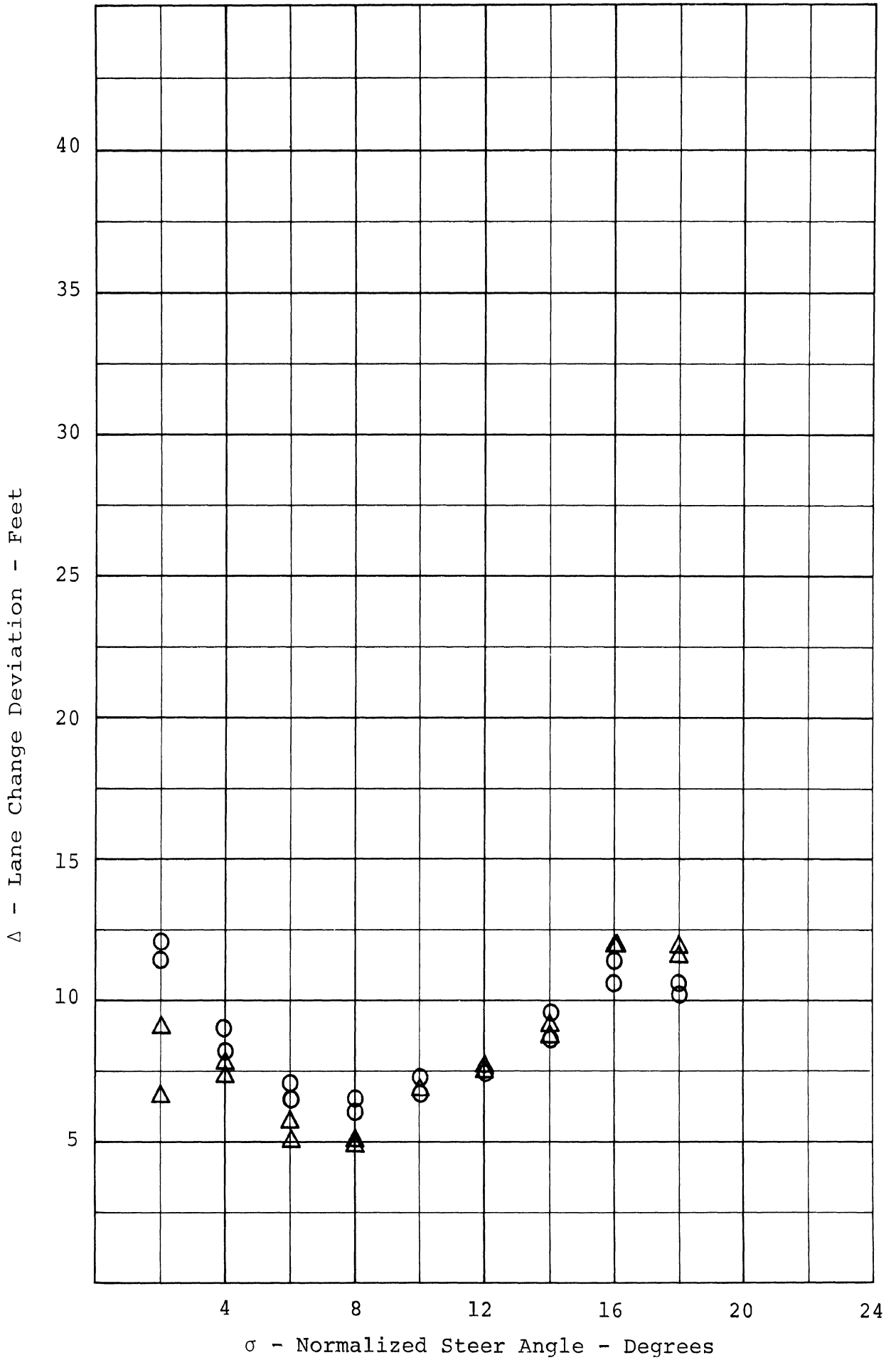
SINUSOIDAL STEER - 45 MPH - VW



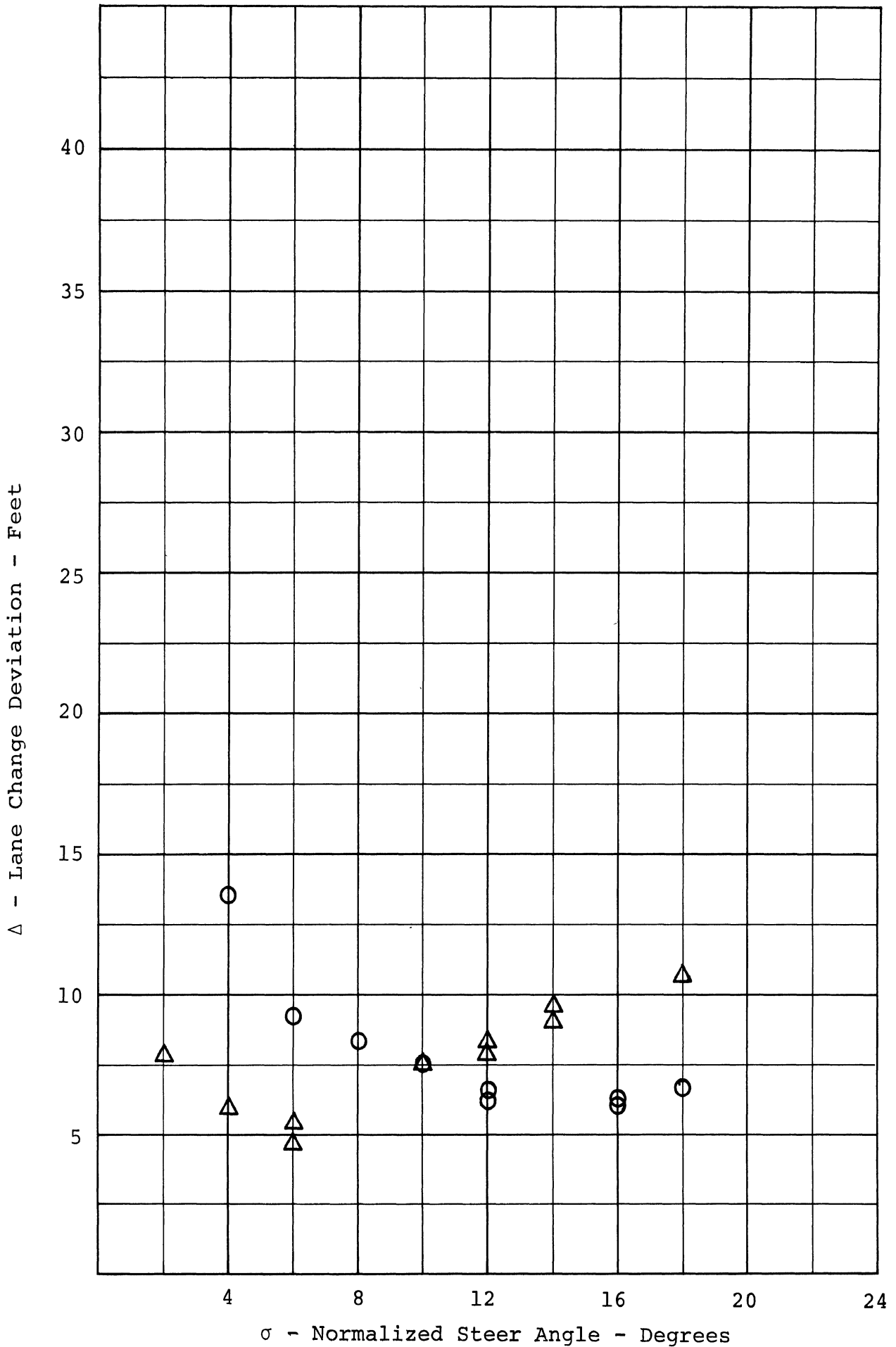
SINUSOIDAL STEER - 60 MPH - AMBASSADOR



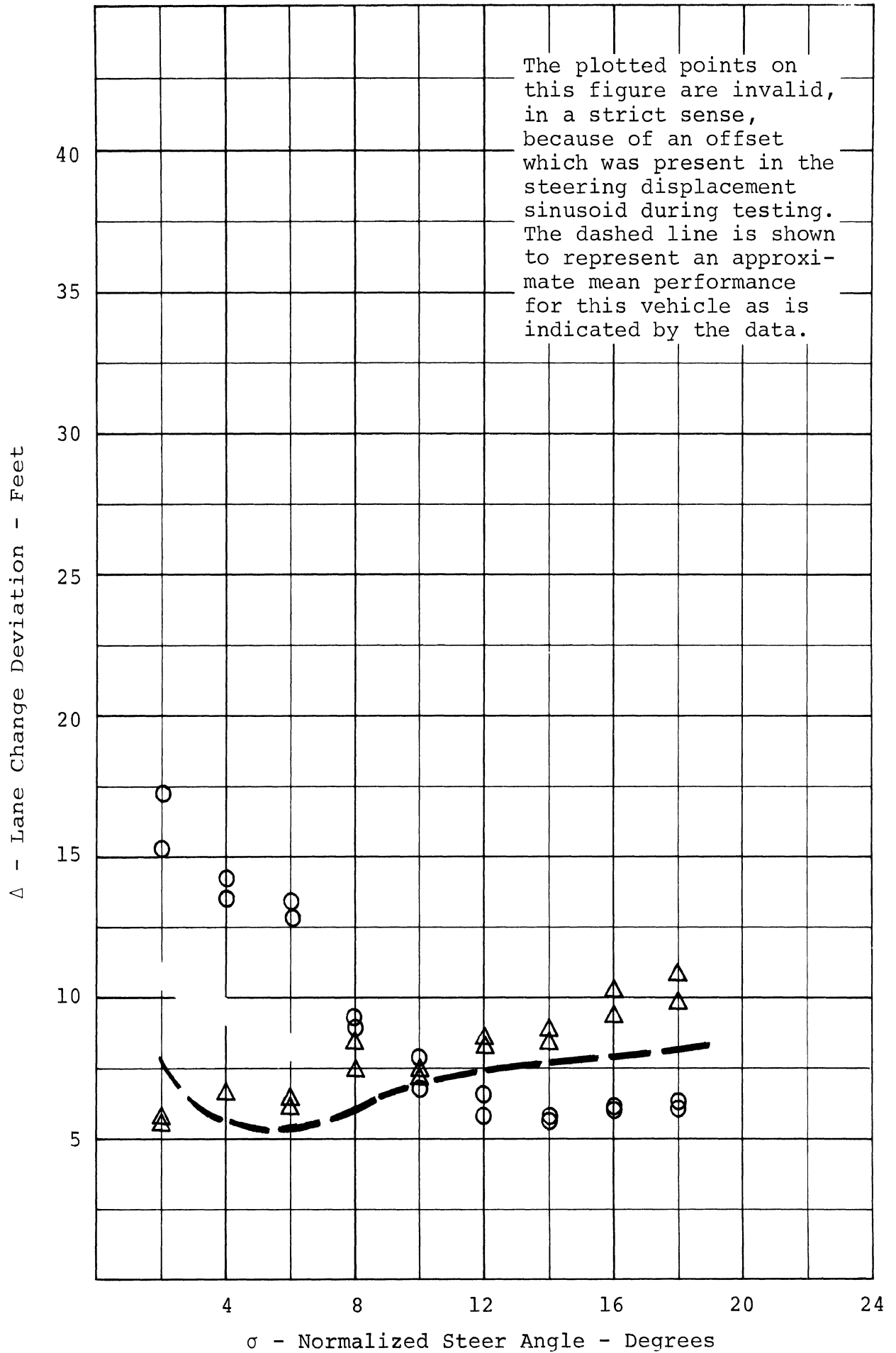
SINUSOIDAL STEER - 60 MPH - BROOKWOOD



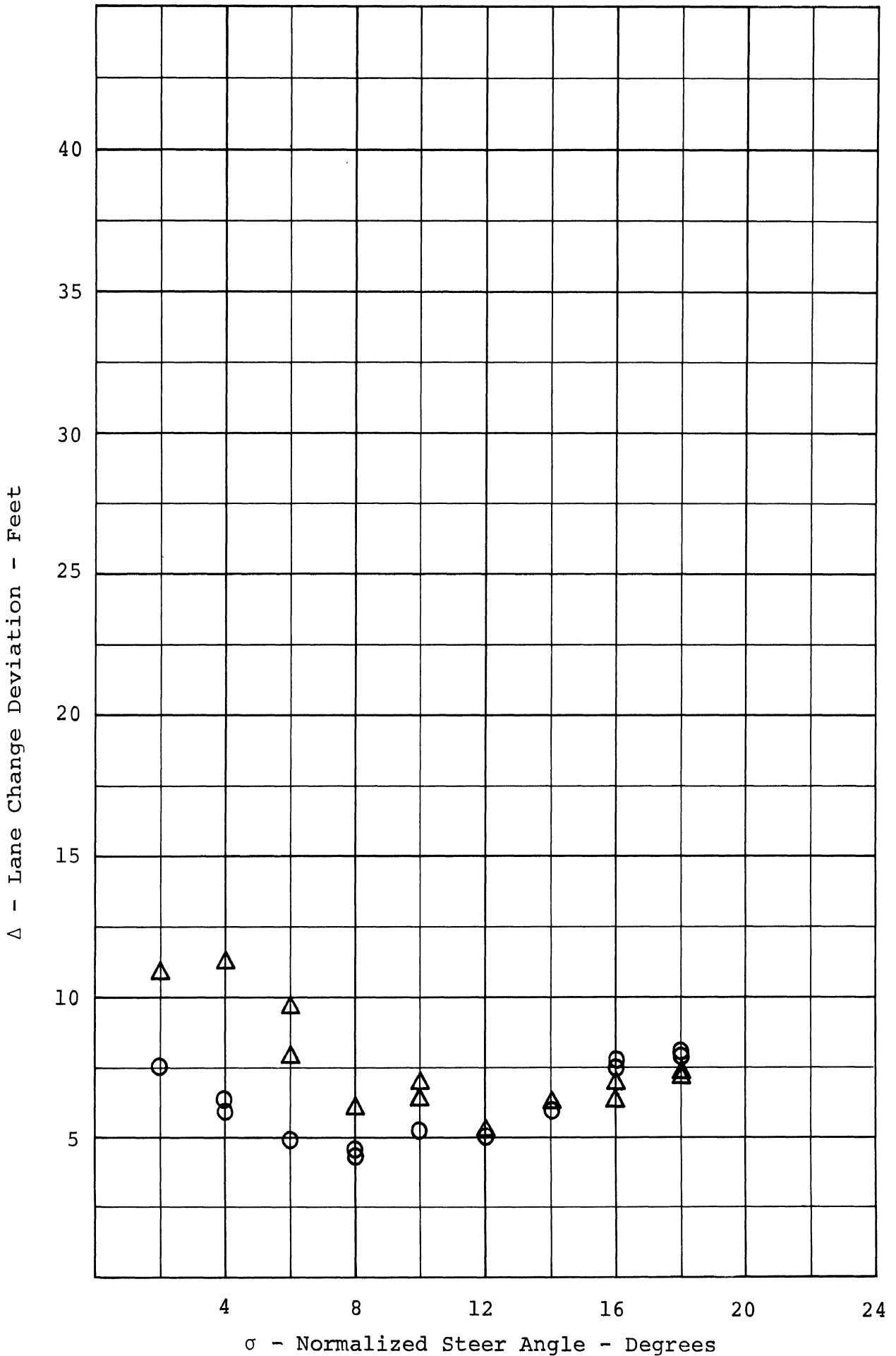
SINUSOIDAL STEER - 60 MPH - DODGE



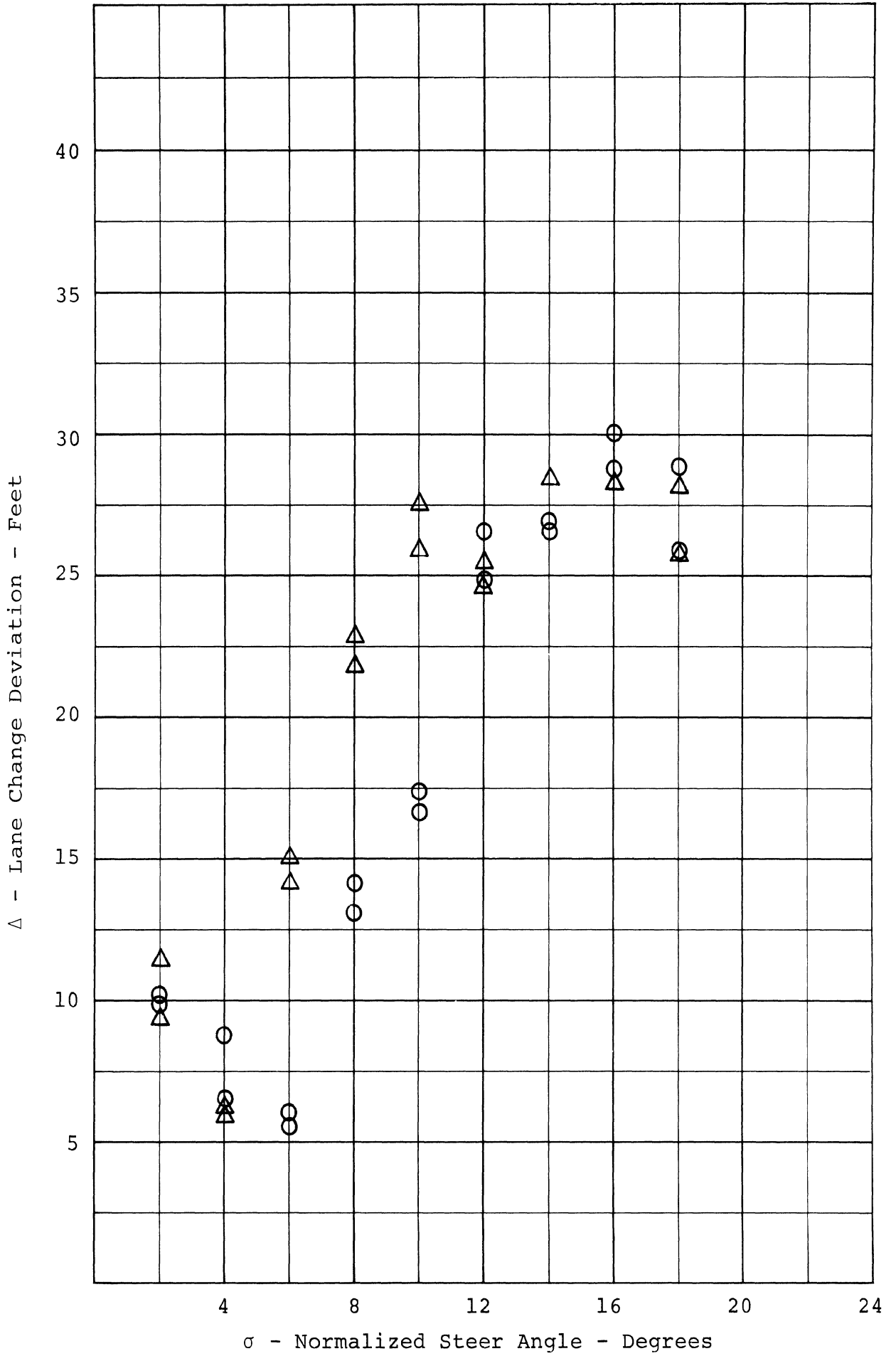
SINUSOIDAL STEER - 60 MPH - FIREBIRD



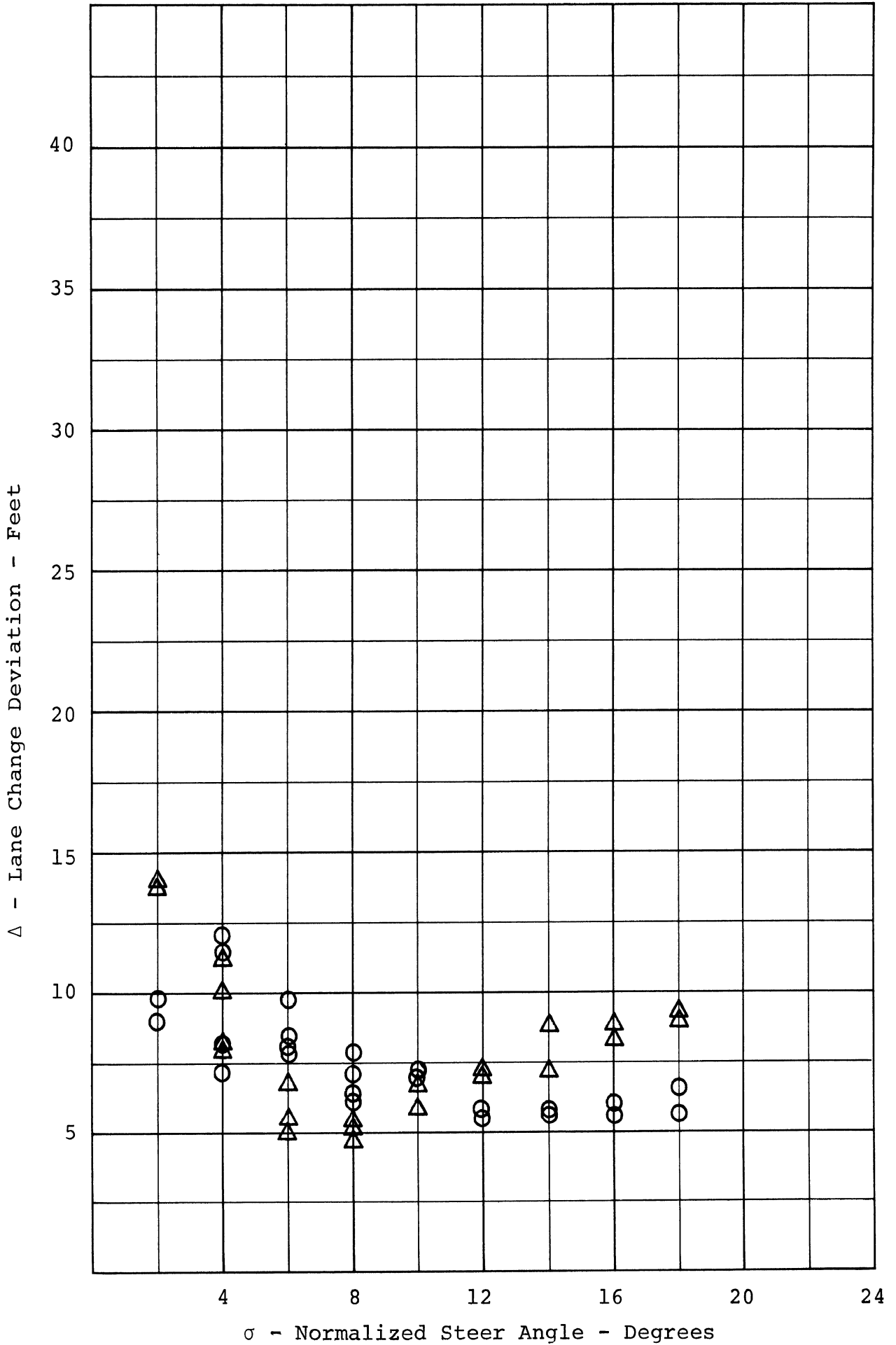
SINUSOIDAL STEER - 60 MPH - GALAXIE



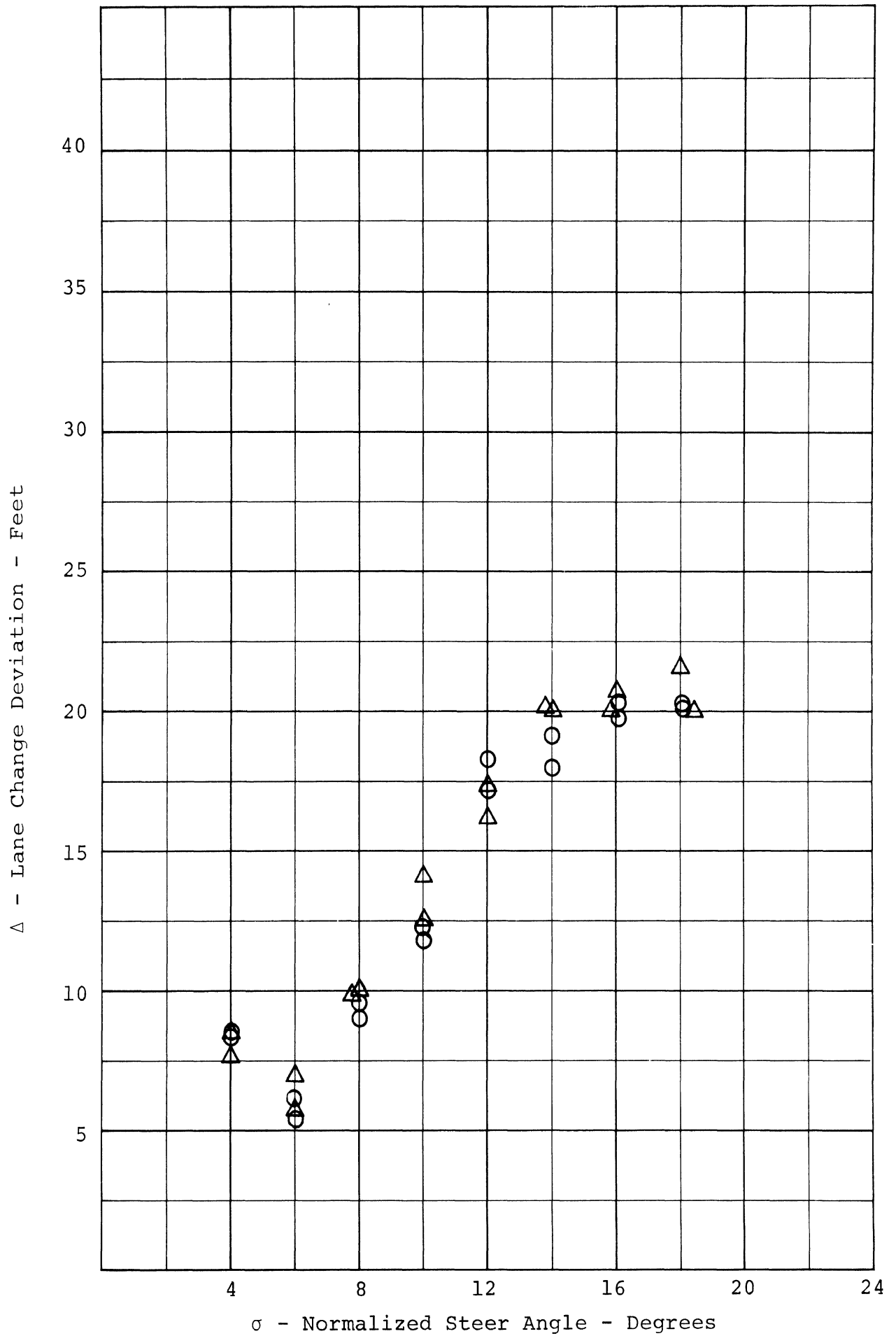
SINUSOIDAL STEER - 60 MPH - GREMLIN



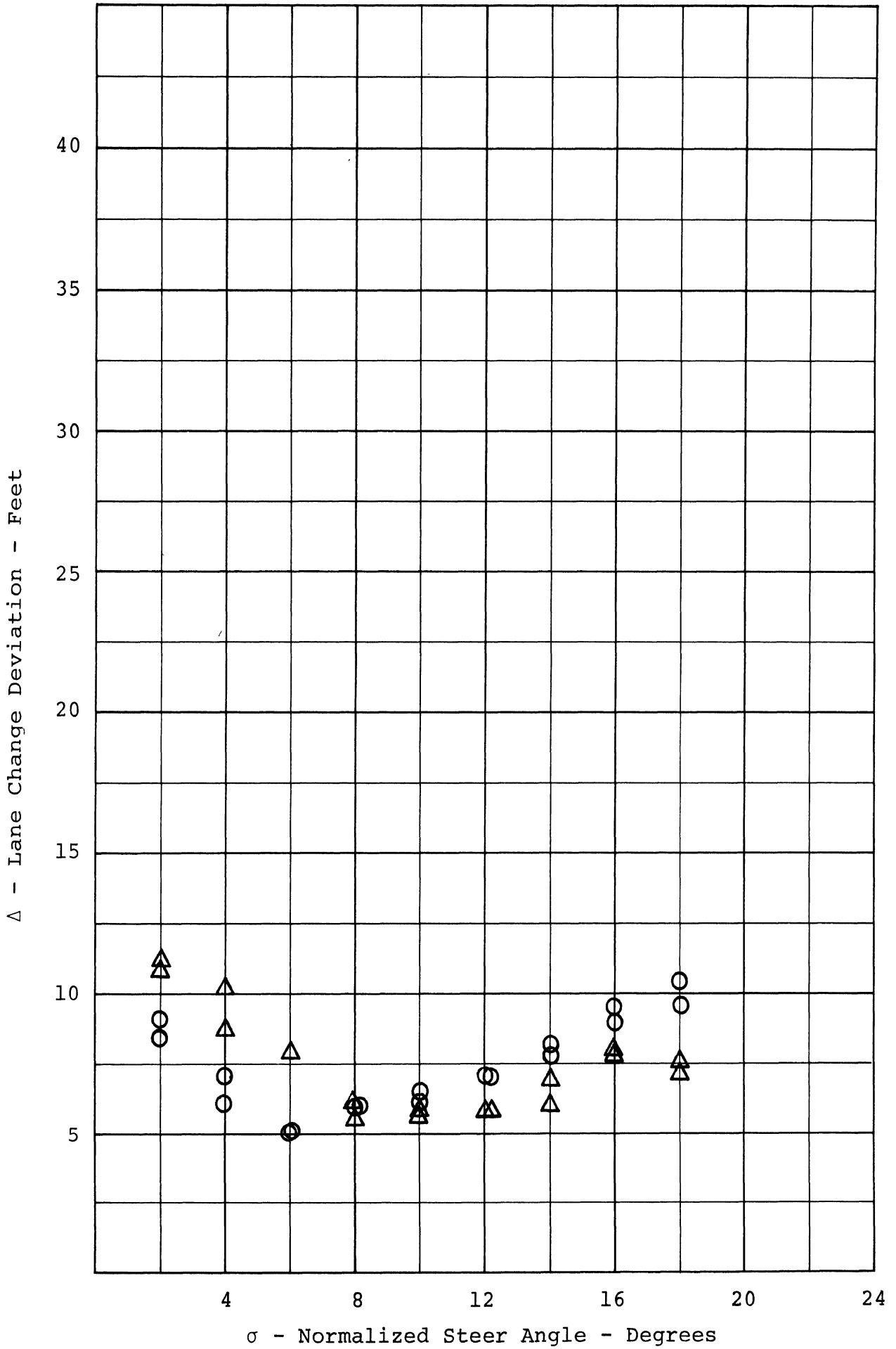
SINUSOIDAL STEER - 60 MPH - LOTUS



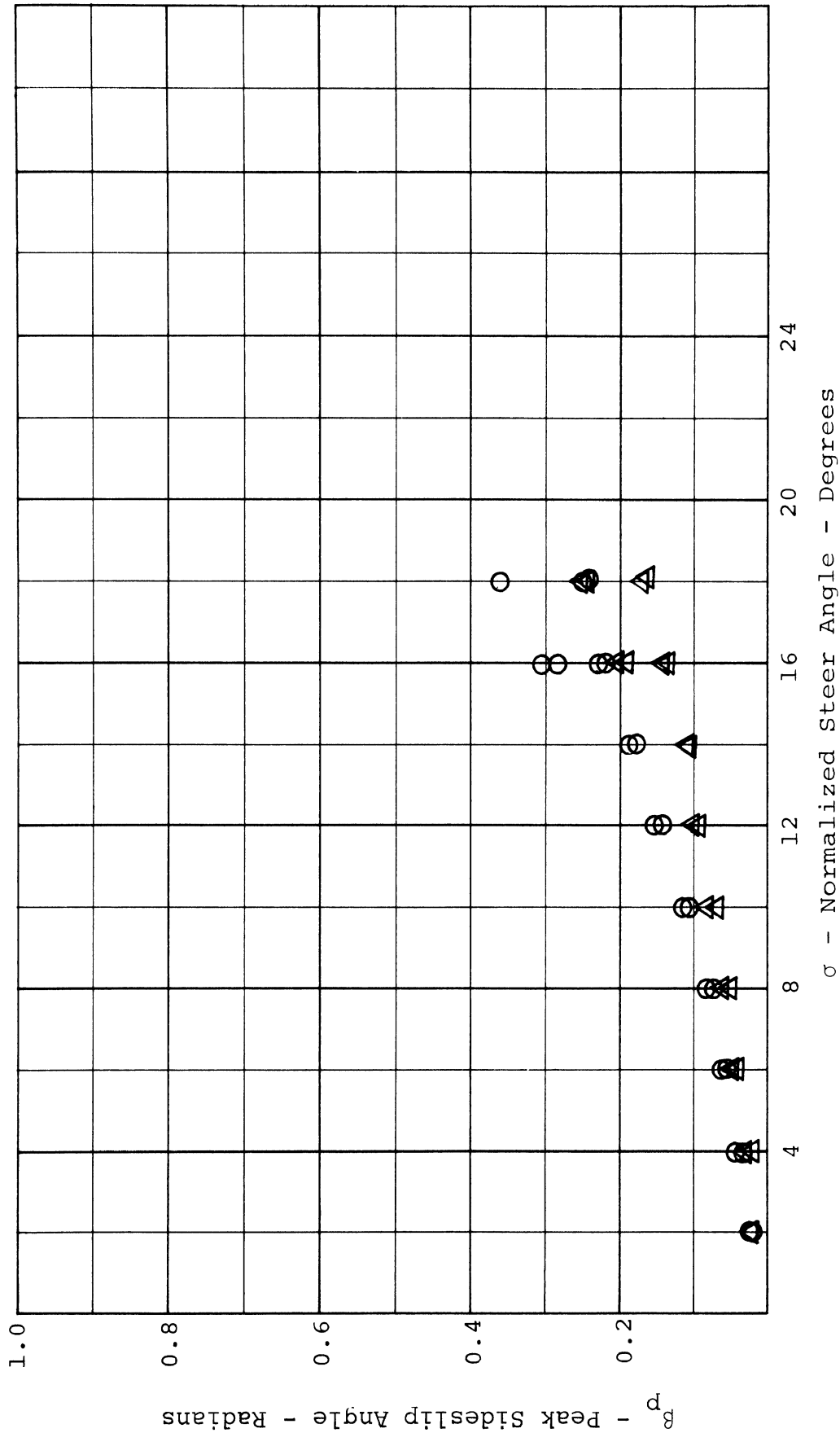
SINUSOIDAL STEER - 60 MPH - IMPERIAL



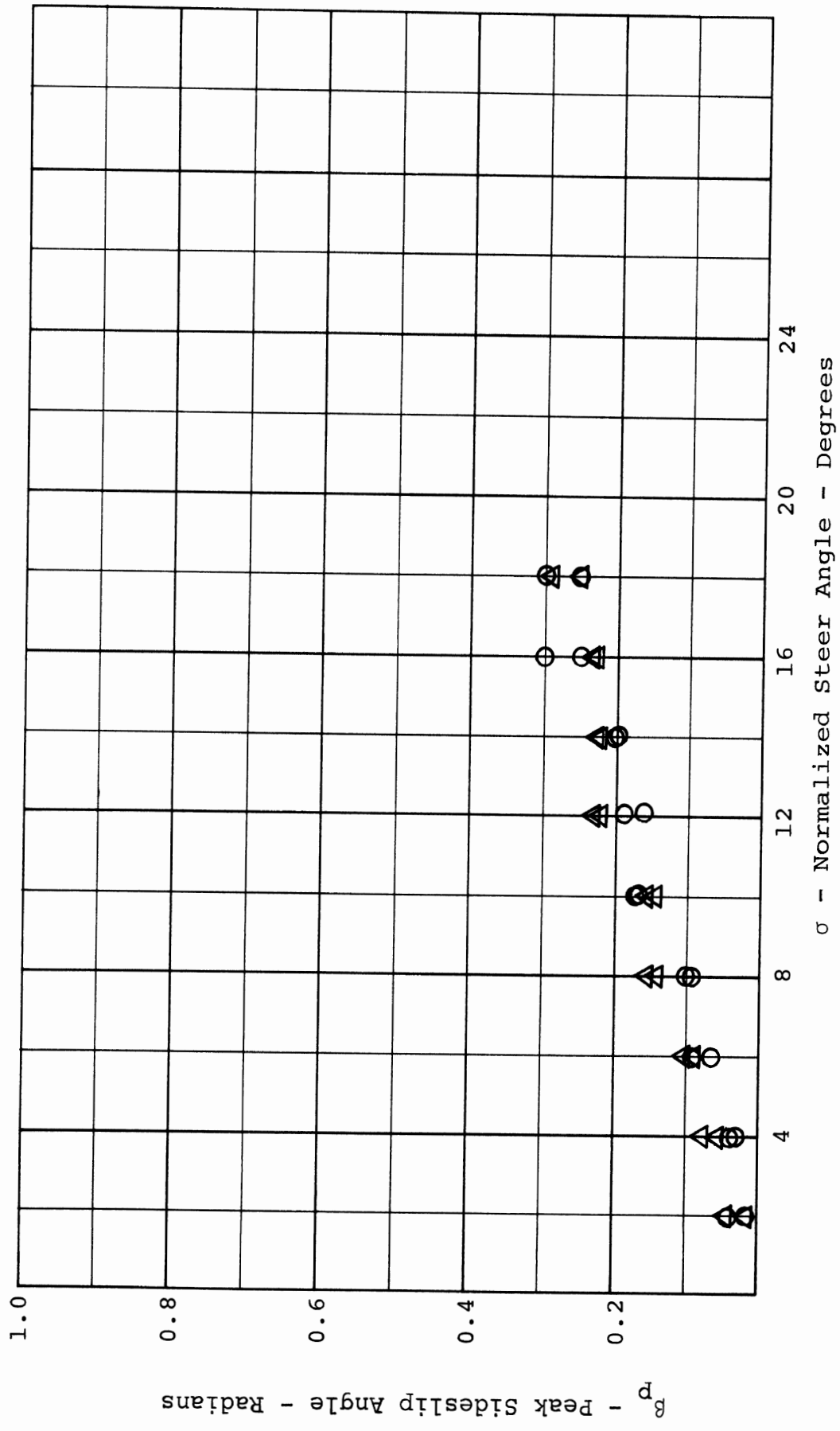
SINUSOIDAL STEER - 60 MPH - MERCEDES



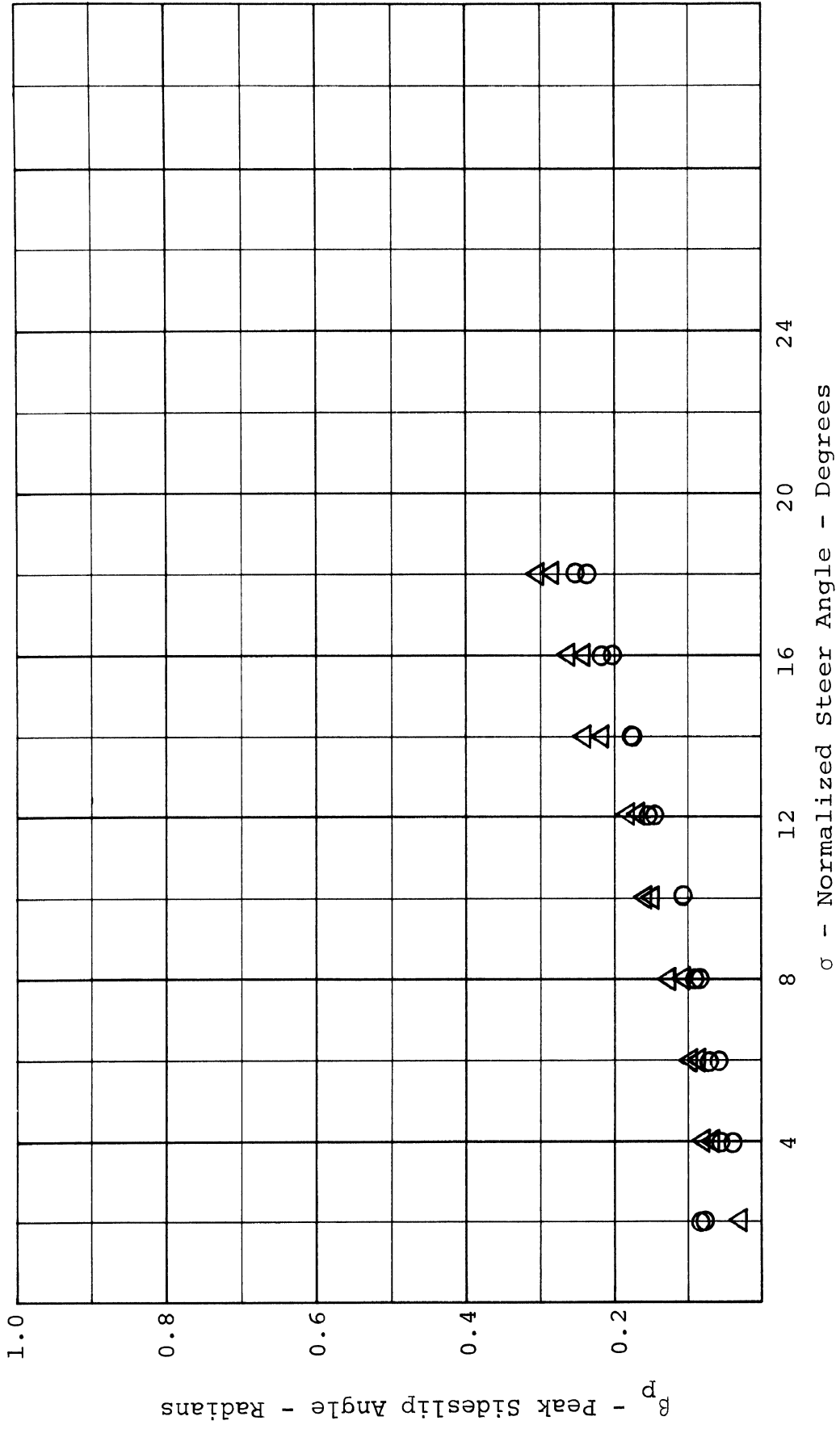
SINUSOIDAL STEER - 60 MPH - TORONADO



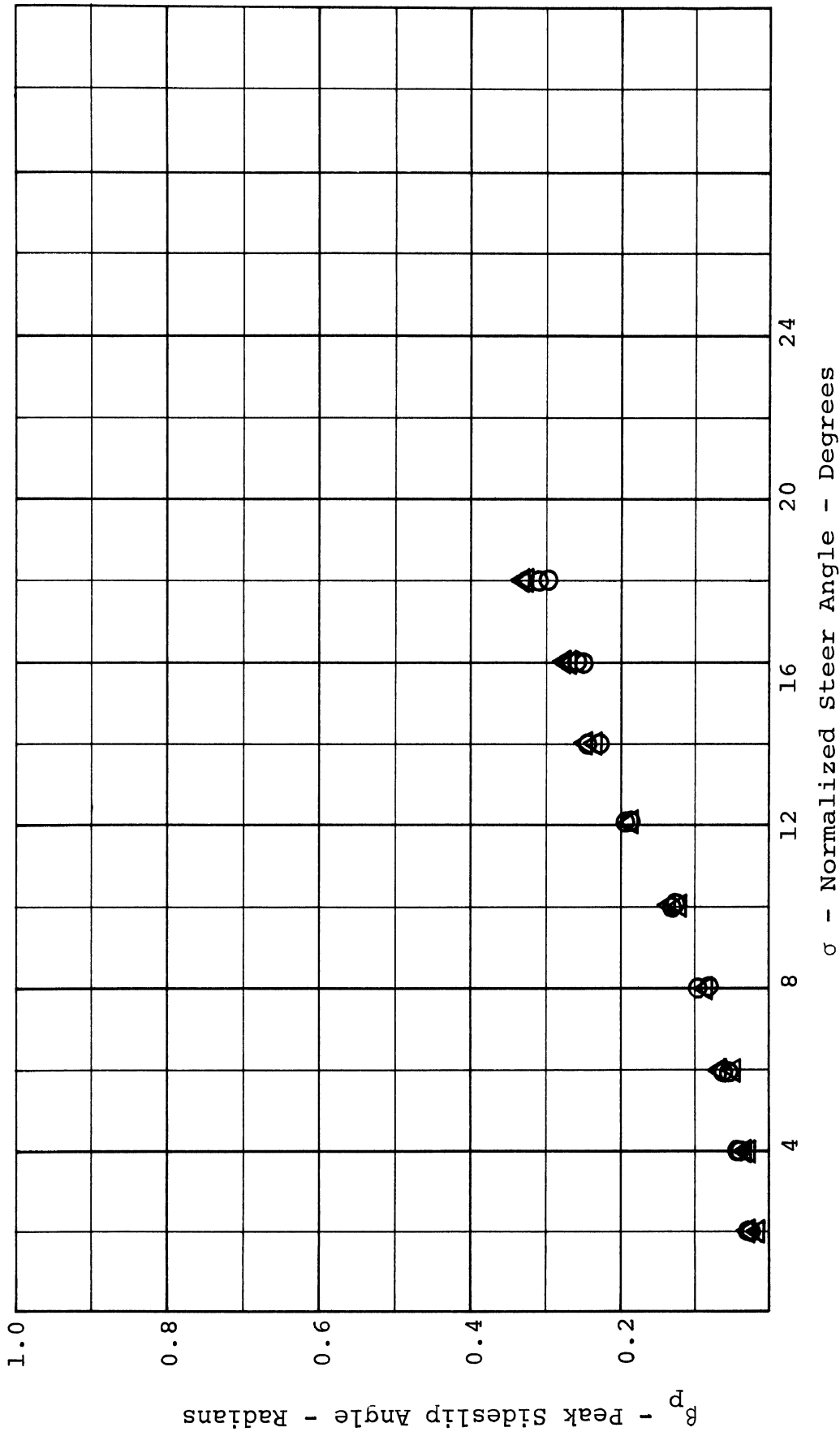
SINUSOIDAL STEER - 45 MPH - AMBASSADOR



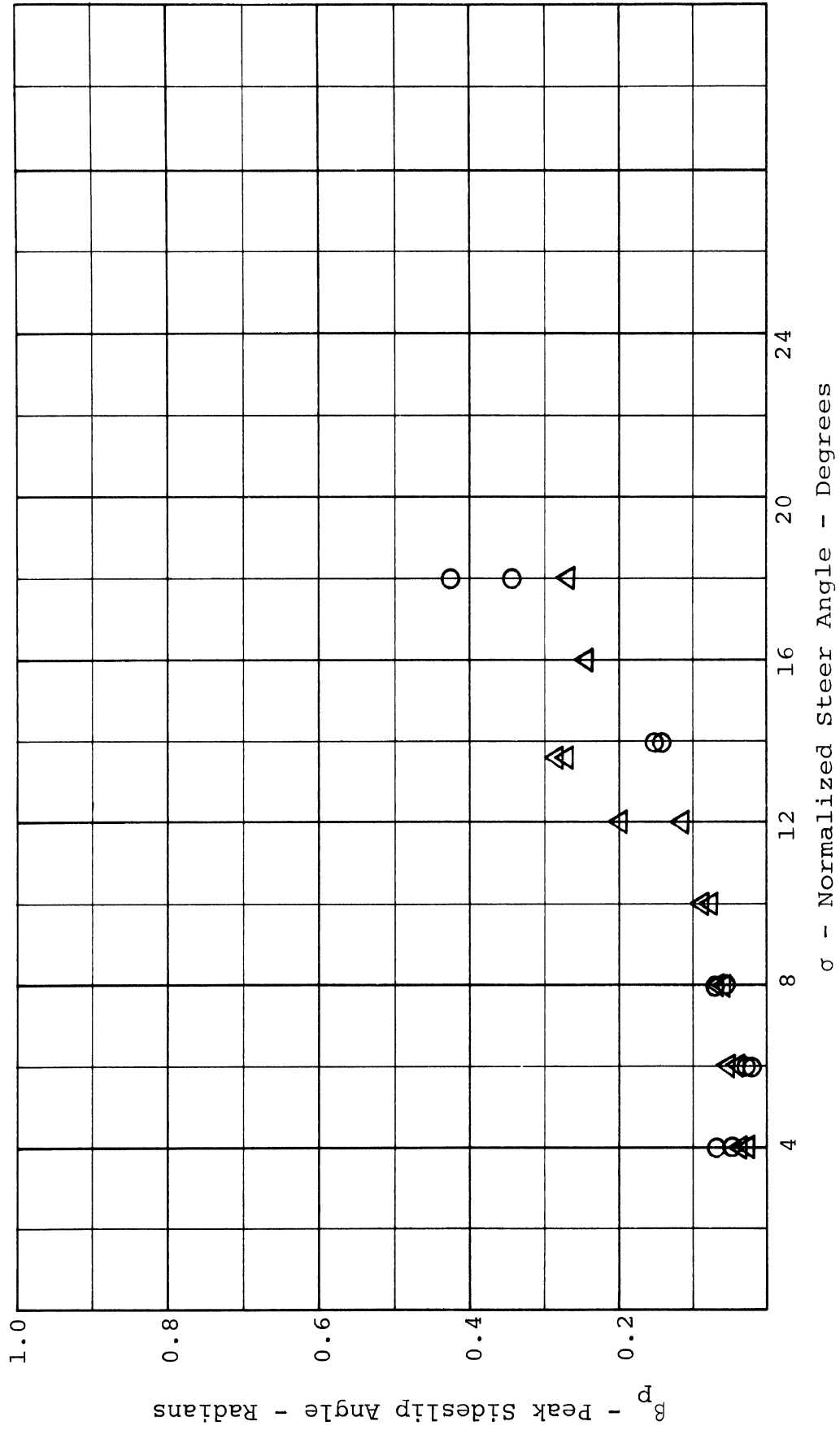
SINUSOIDAL STEER - 45 MPH - AUSTIN



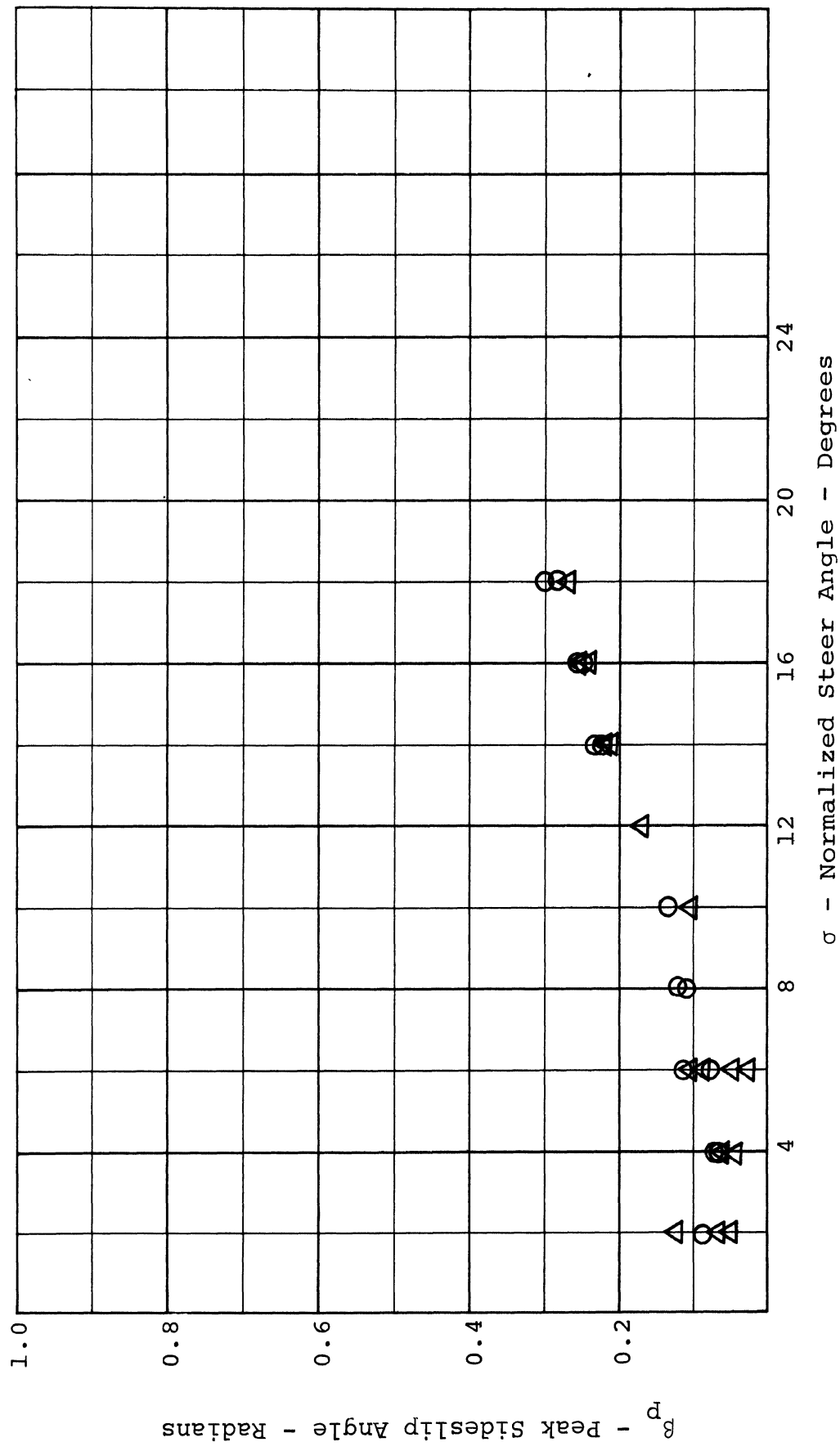
SINUSOIDAL STEER - 45 MPH - BROOKWOOD



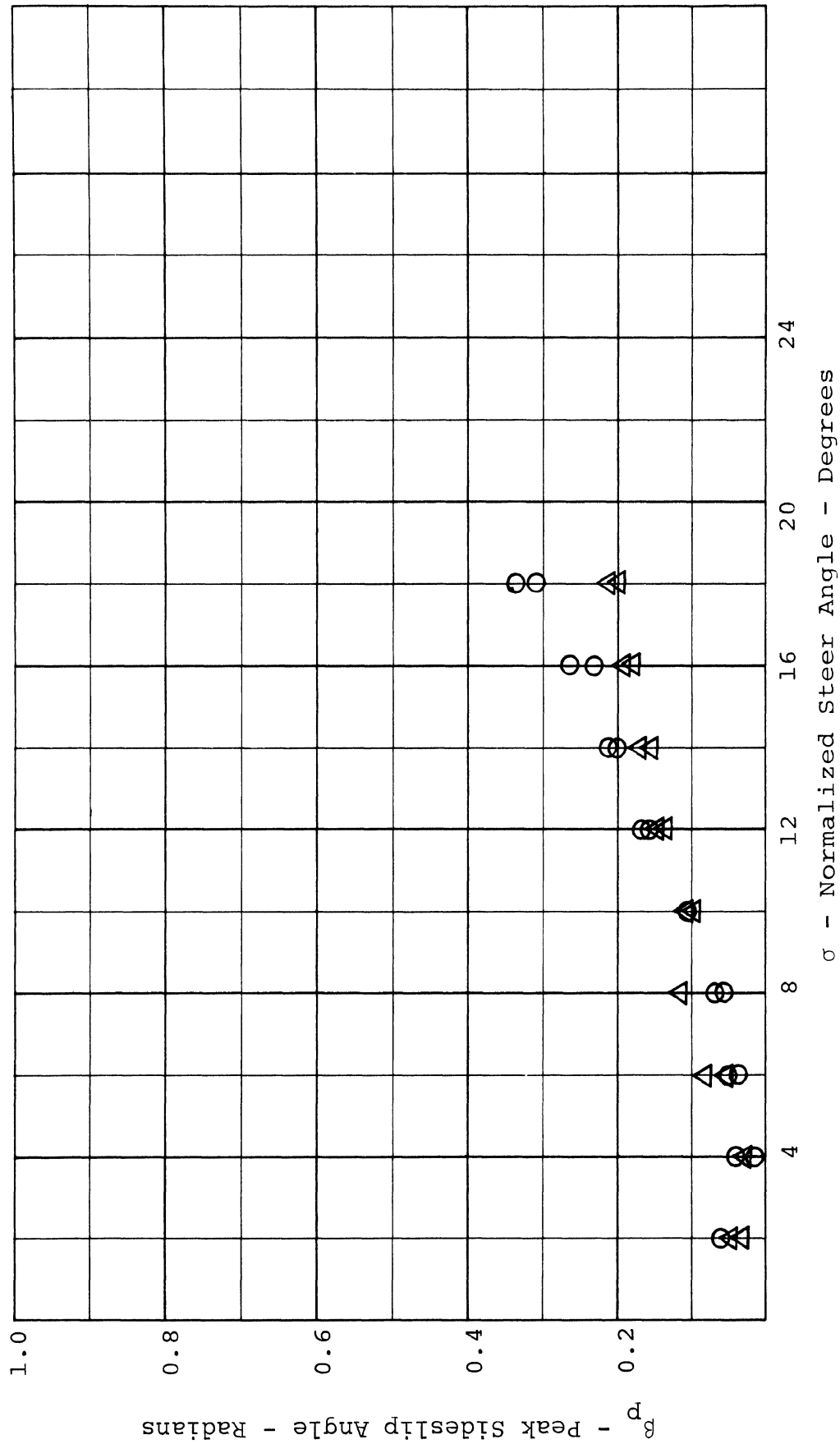
SINUSOIDAL STEER - 45 MPH - DODGE



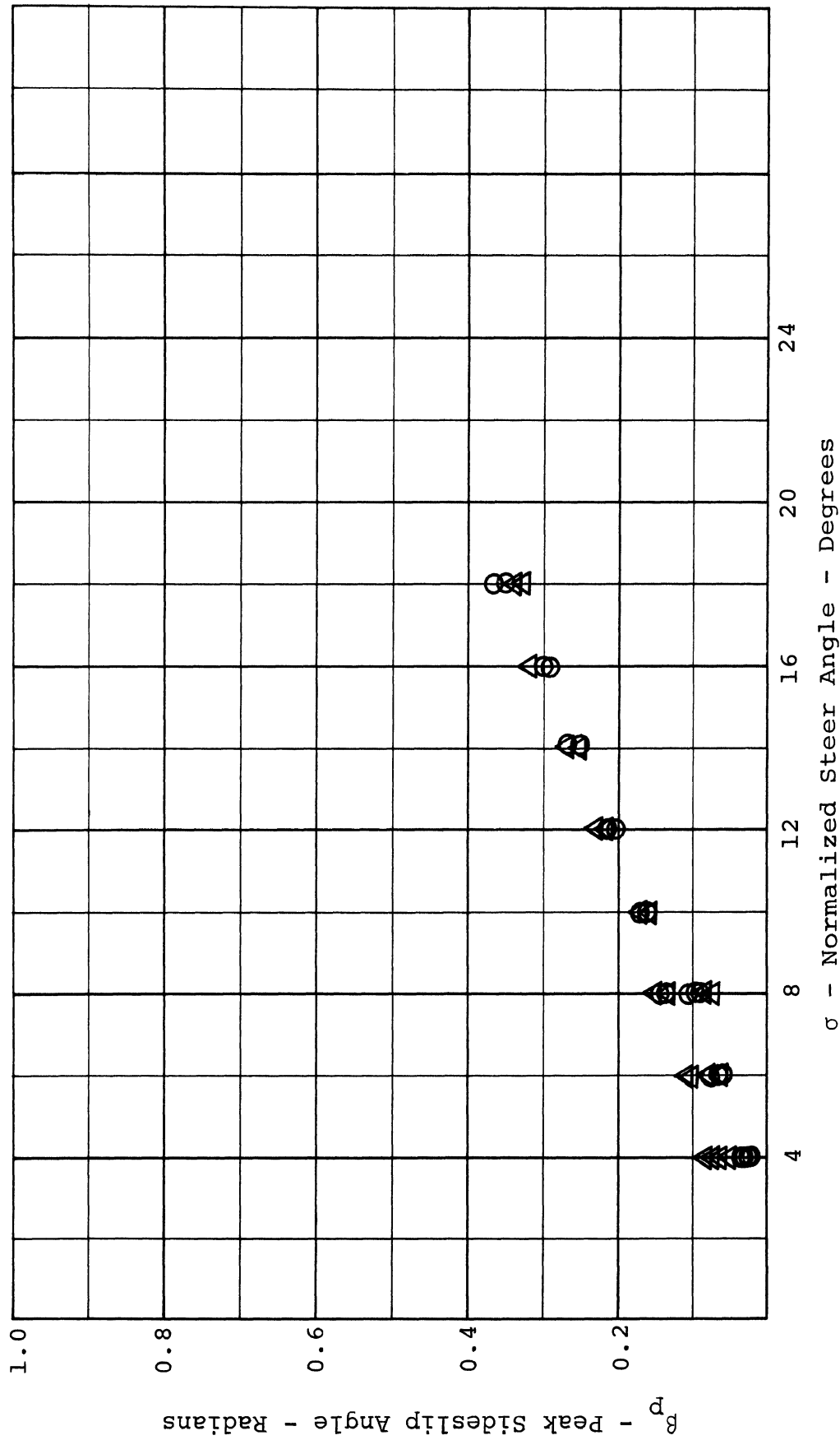
SINUSOIDAL STEER - 45 MPH - FIREBIRD



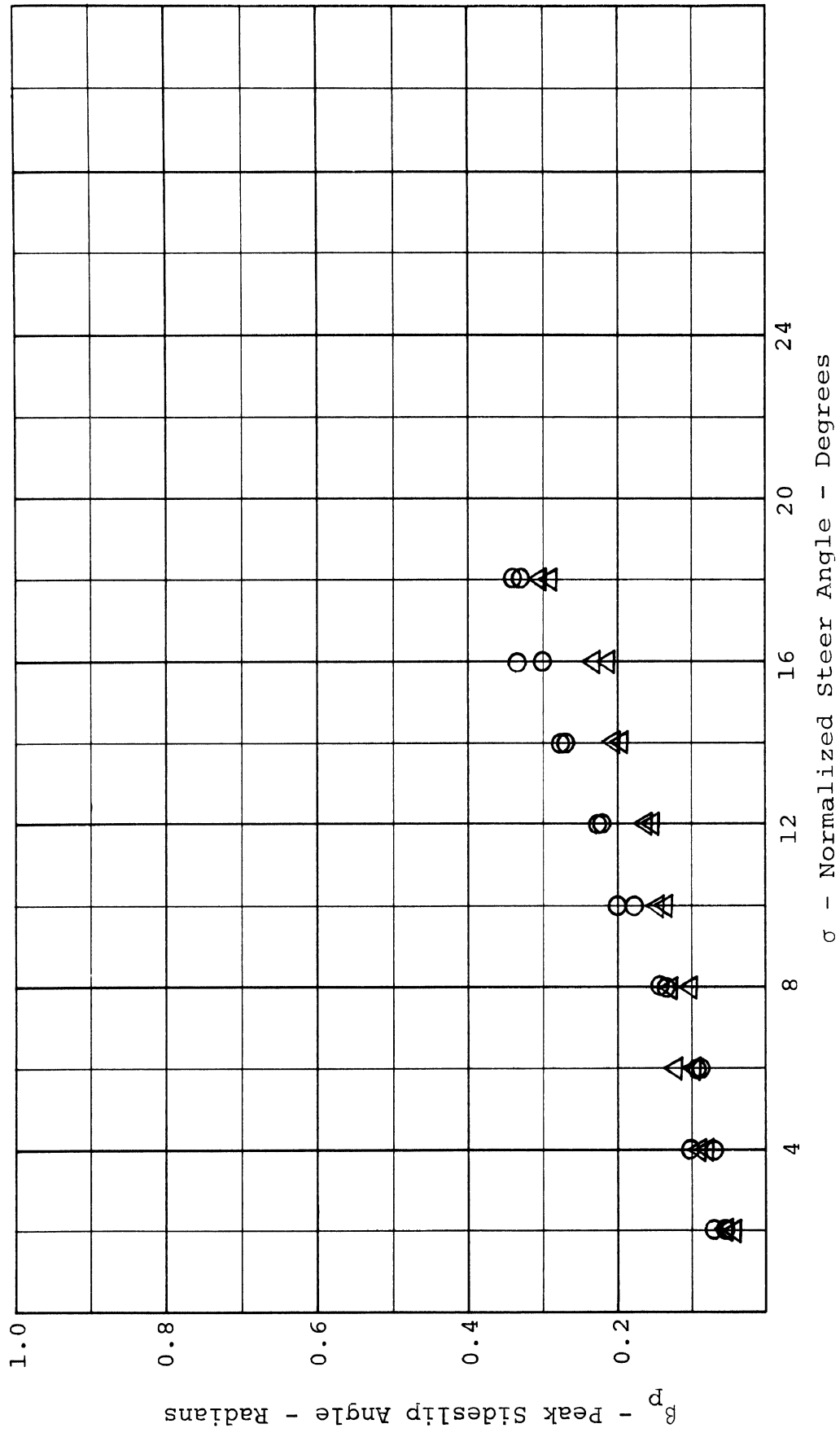
SINUSOIDAL STEER - 45 MPH - GALAXIE



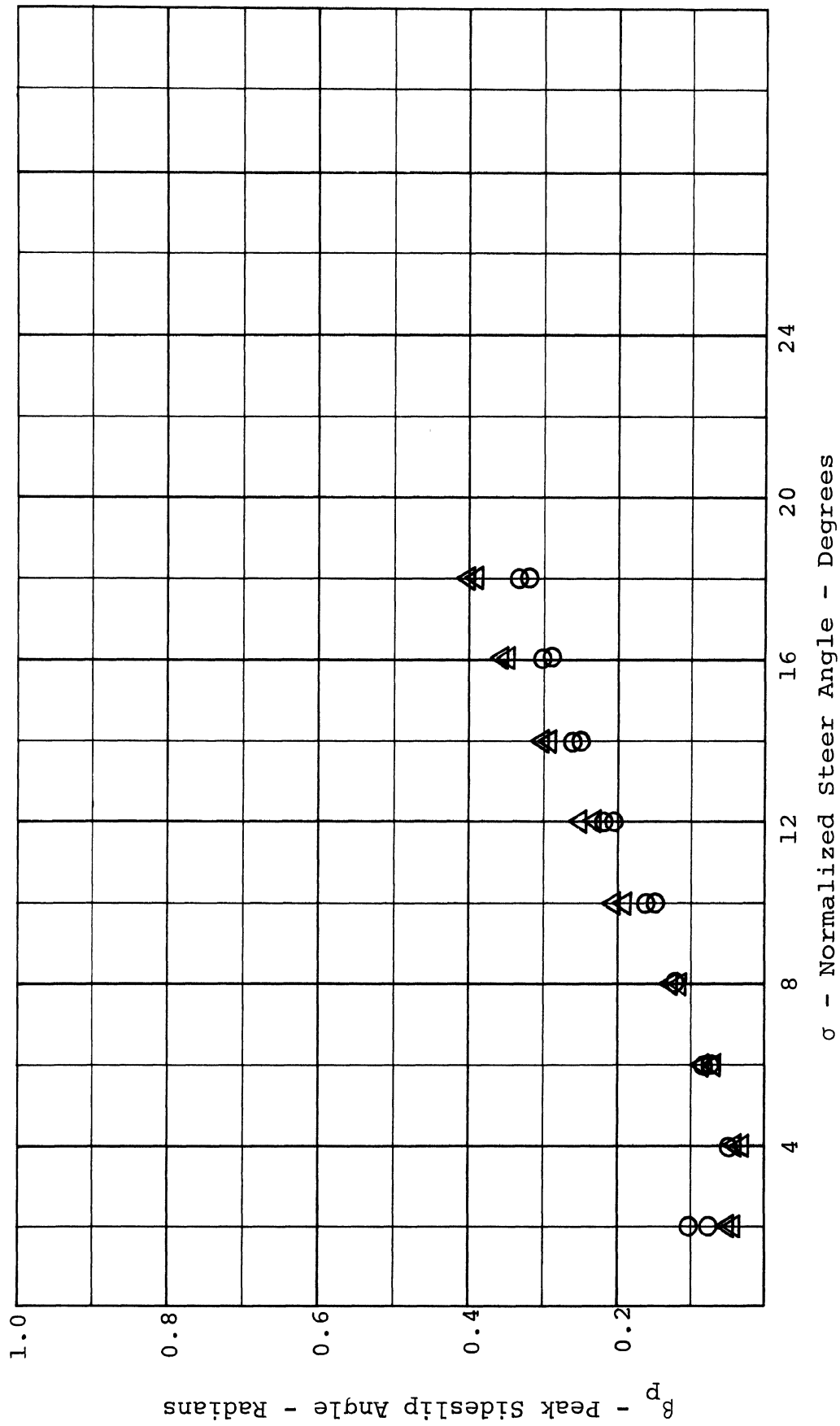
SINUSOIDAL STEER - 45 MPH - GREMLIN



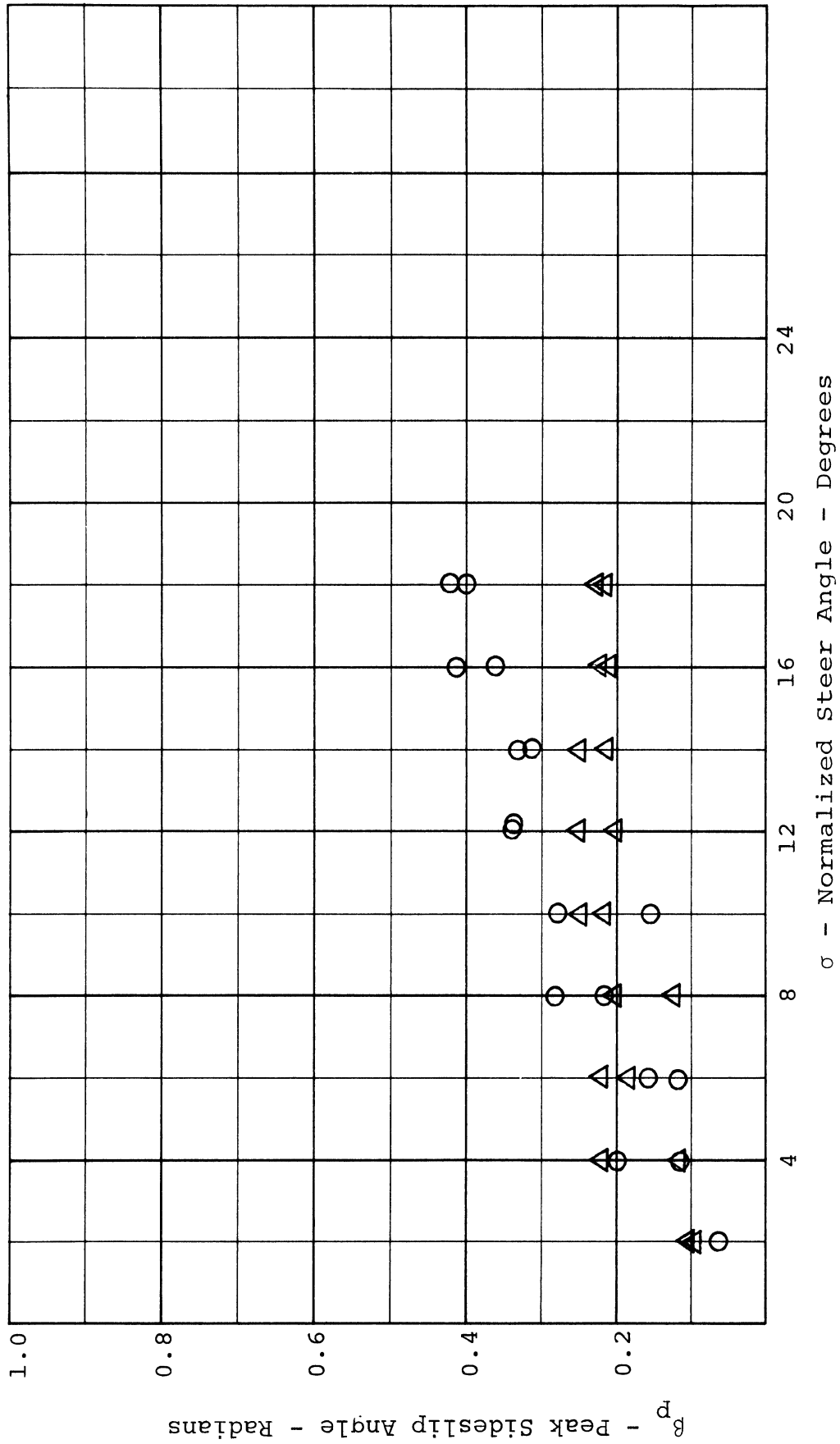
SINUSOIDAL STEER - 45 MPH - IMPERIAL



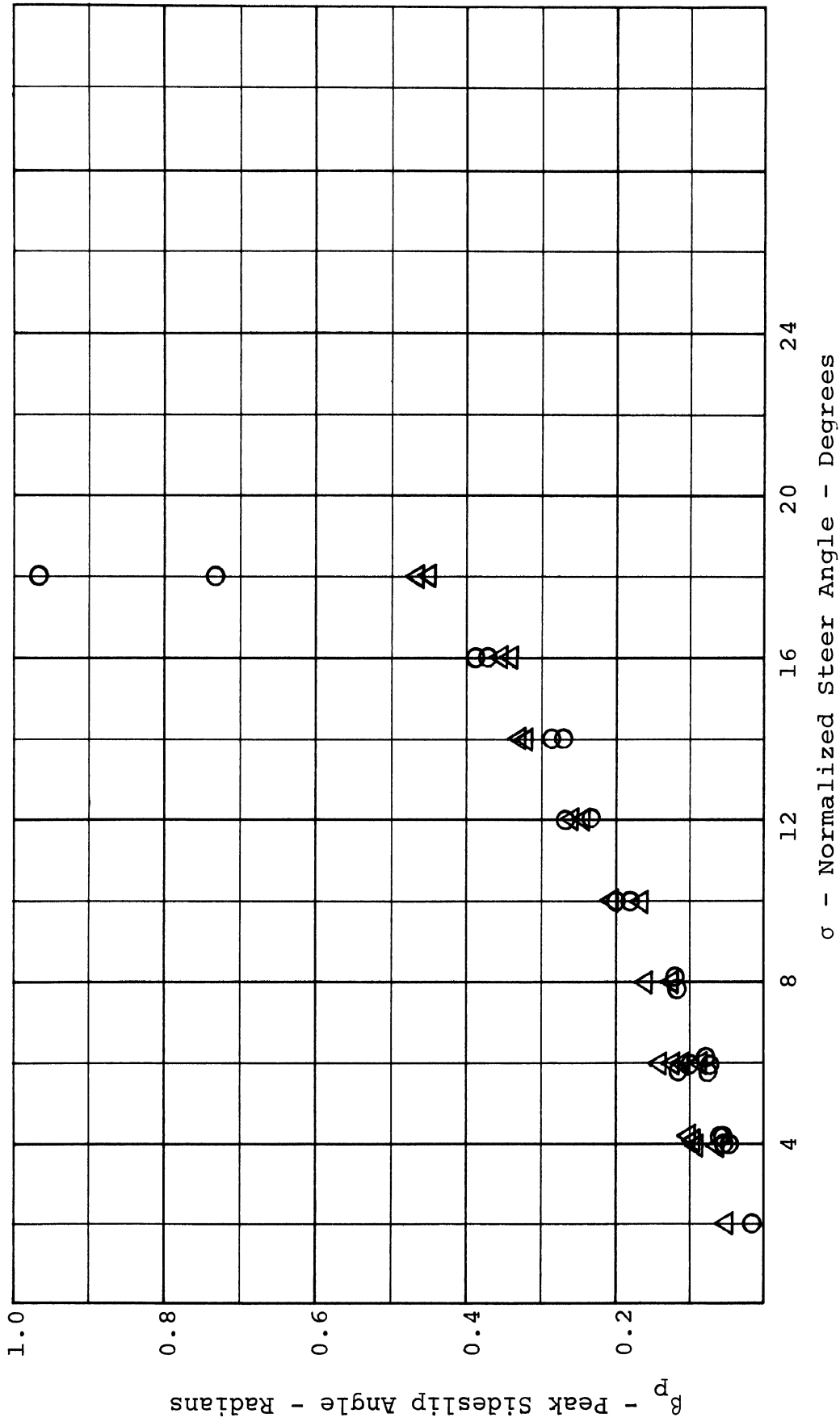
SINUSOIDAL STEER - 45 MPH - Lotus



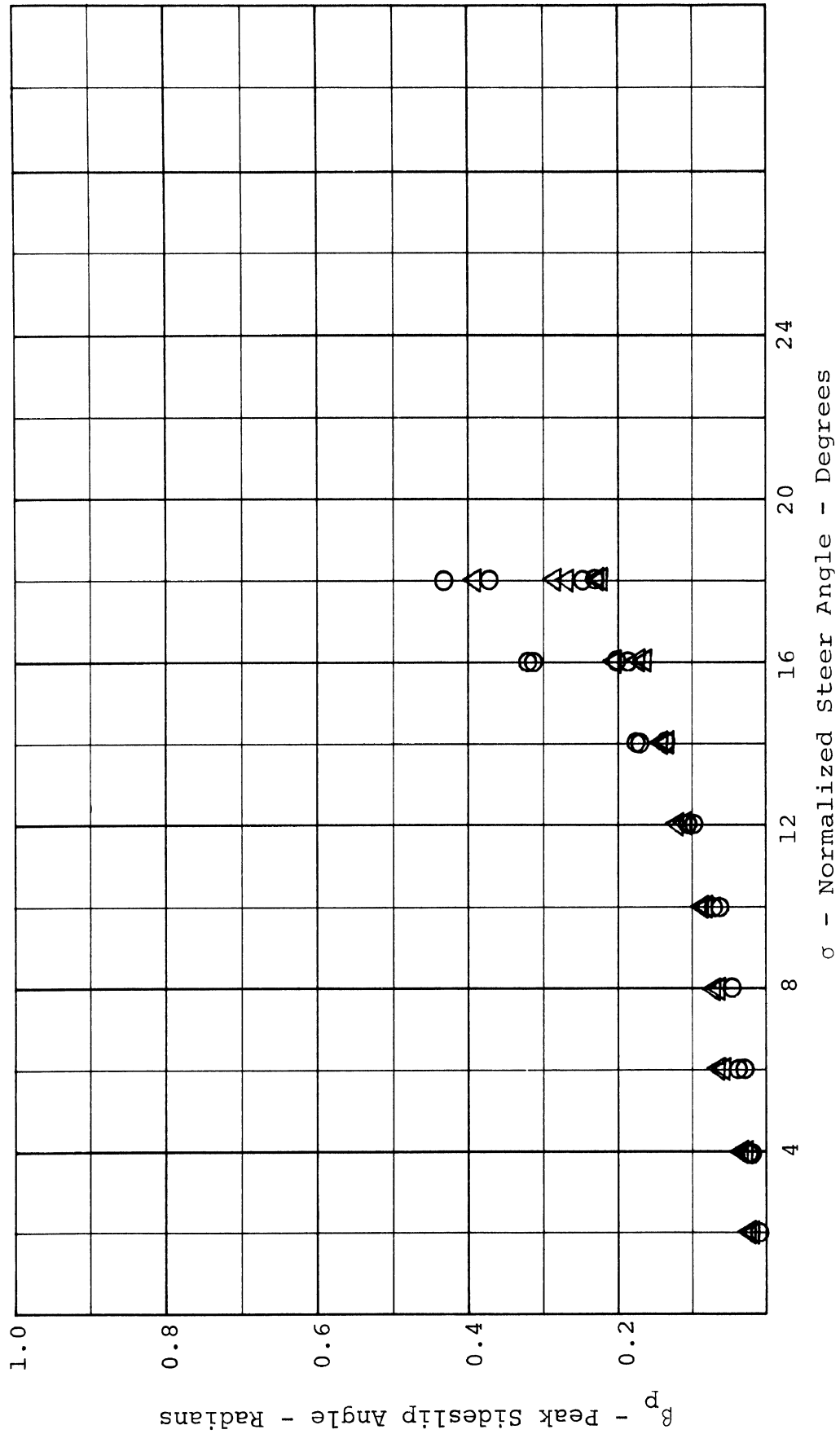
SINUSOIDAL STEER - 45 MPH - MERCEDES



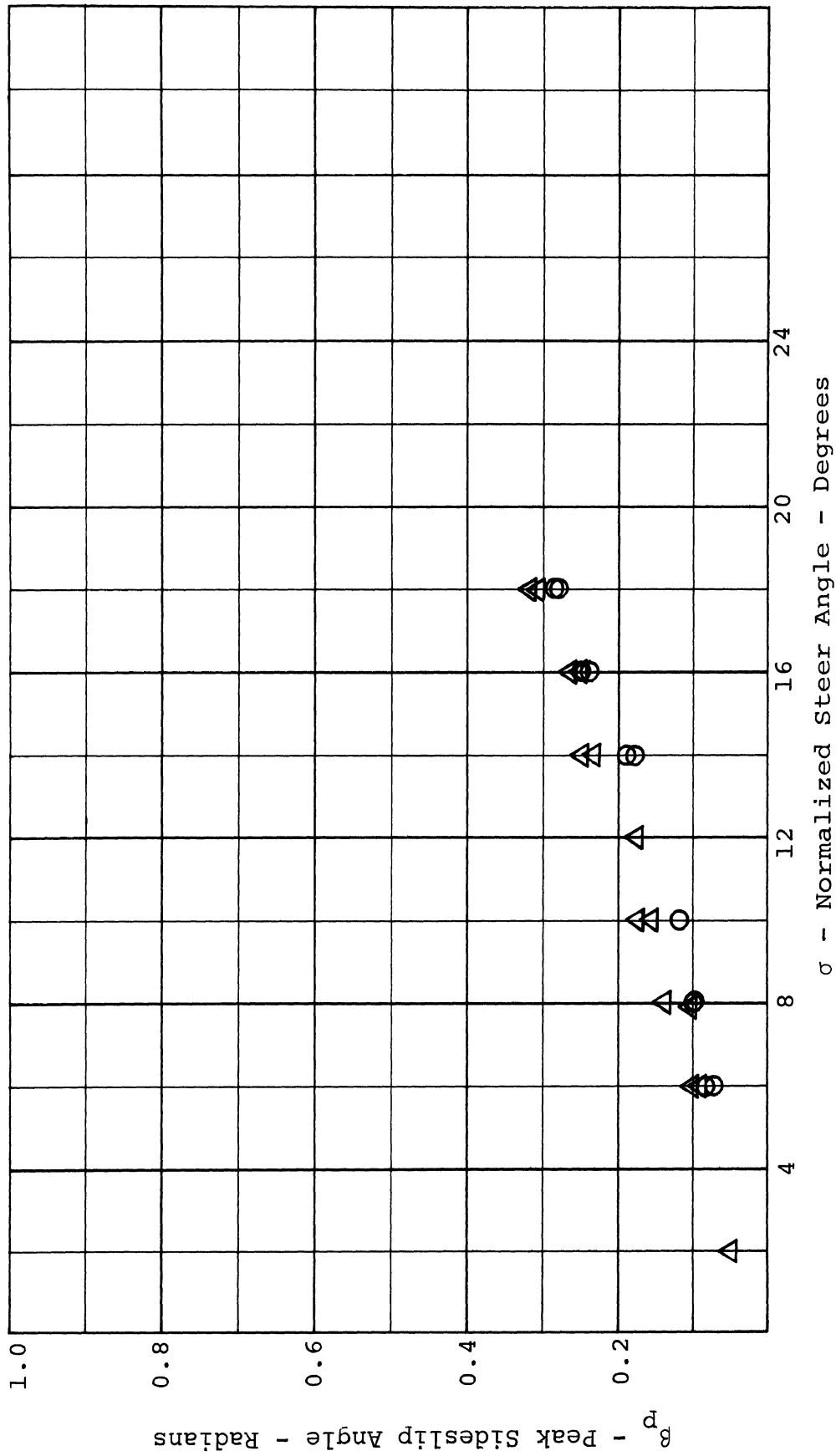
SINUSOIDAL STEER - 45 MPH - TORONADO



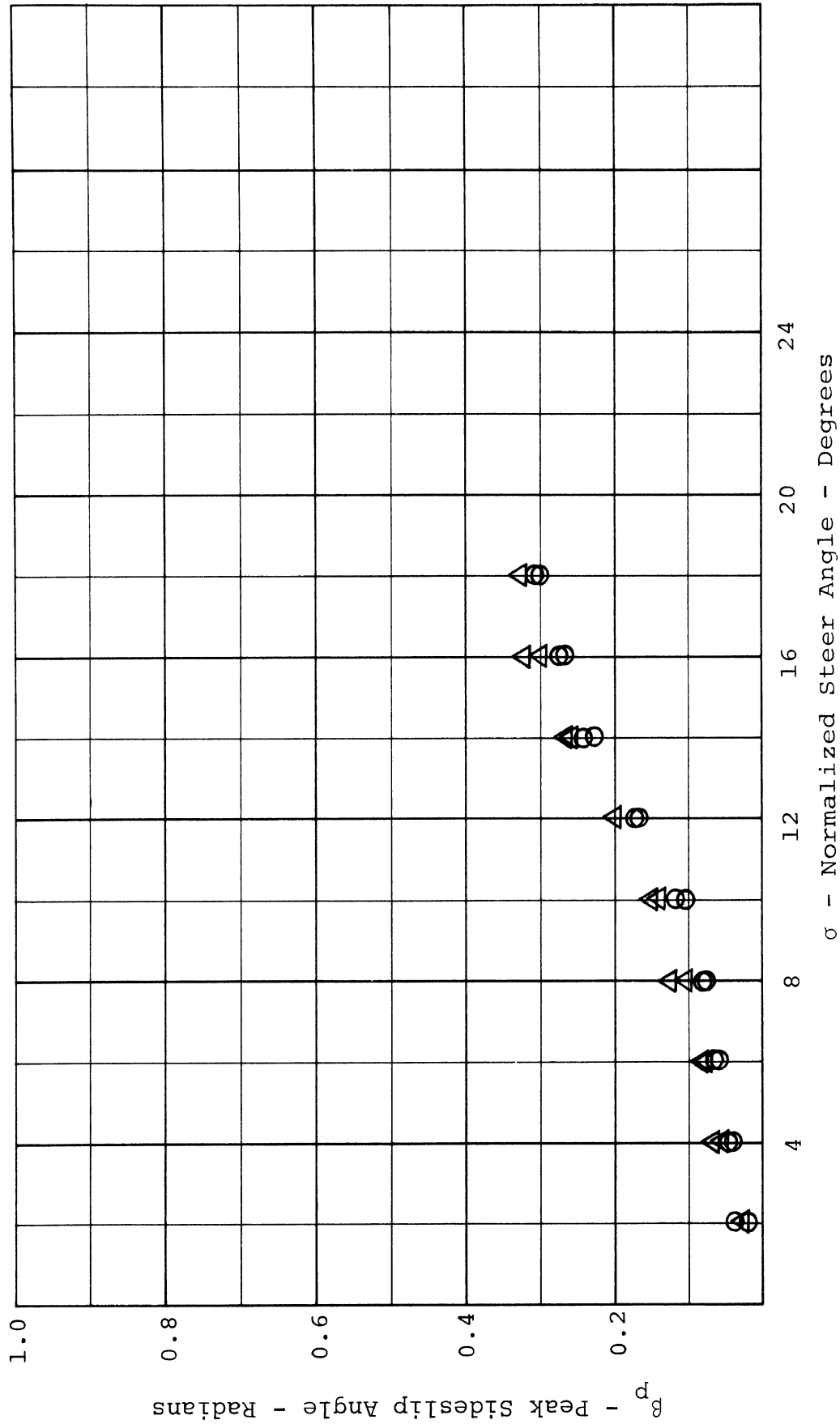
SINUSOIDAL STEER - 45 MPH - VW



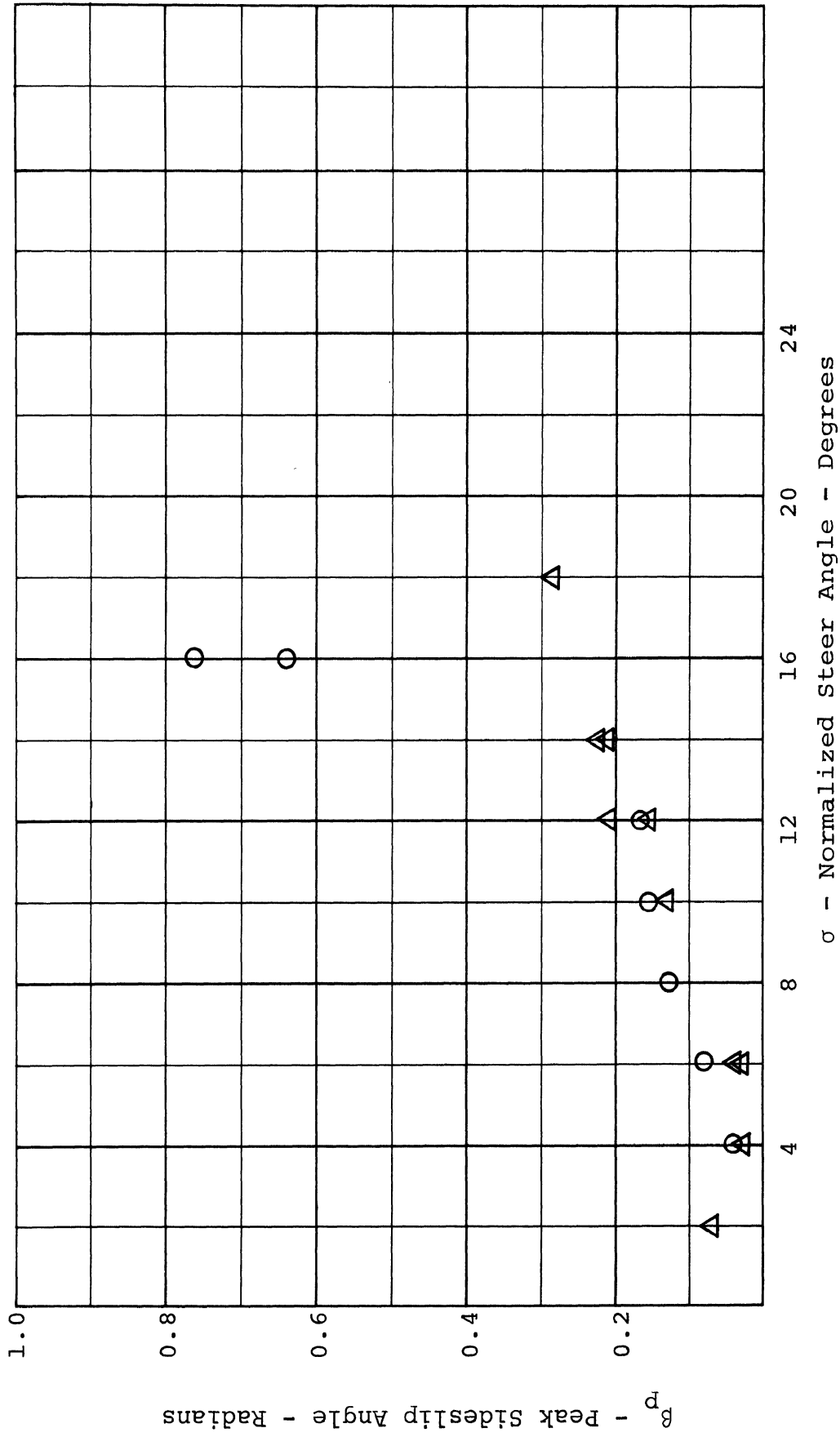
SINUSOIDAL STEER - 60 MPH - AMBASSADOR



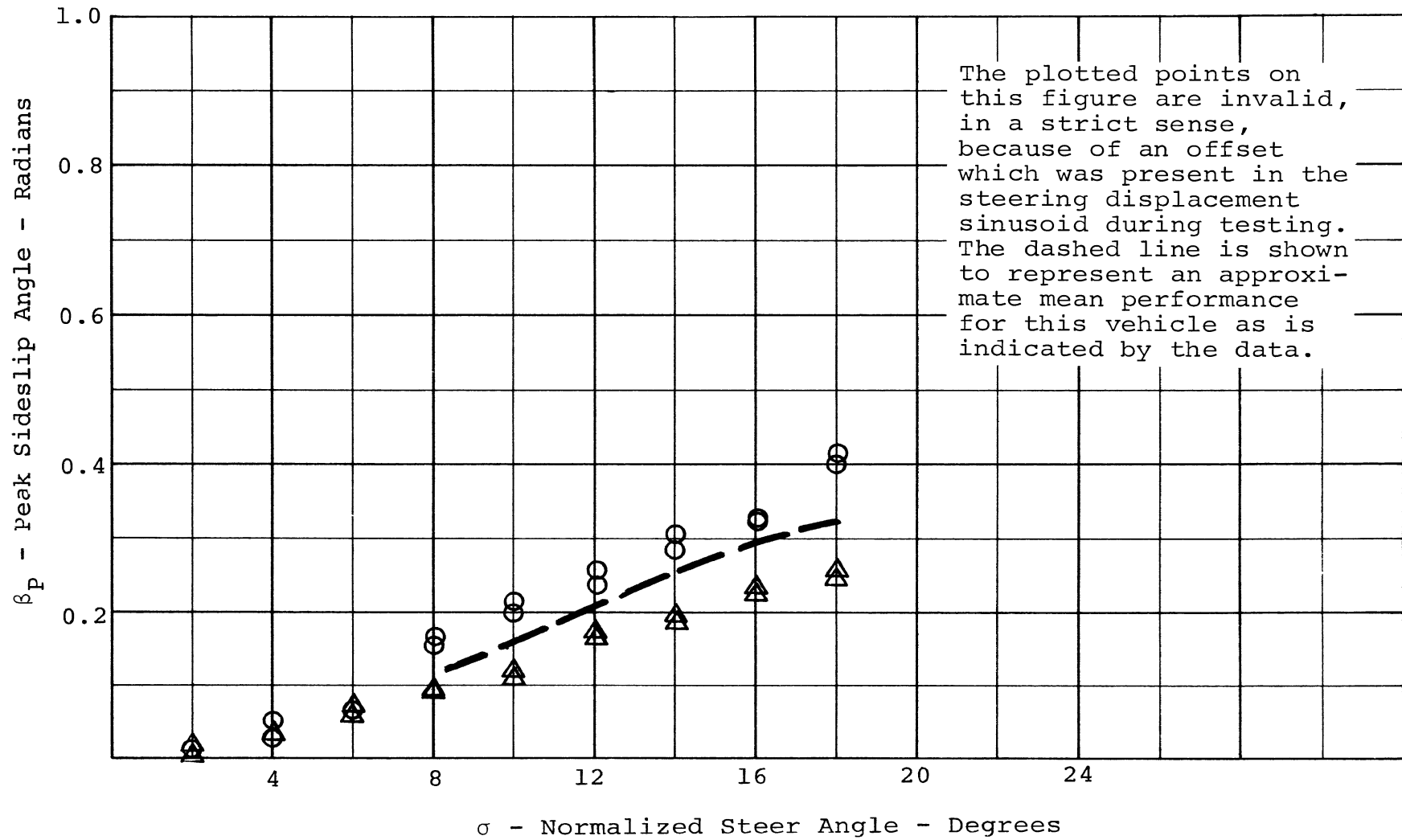
SINUSOIDAL STEER - 60 MPH - BROOKWOOD



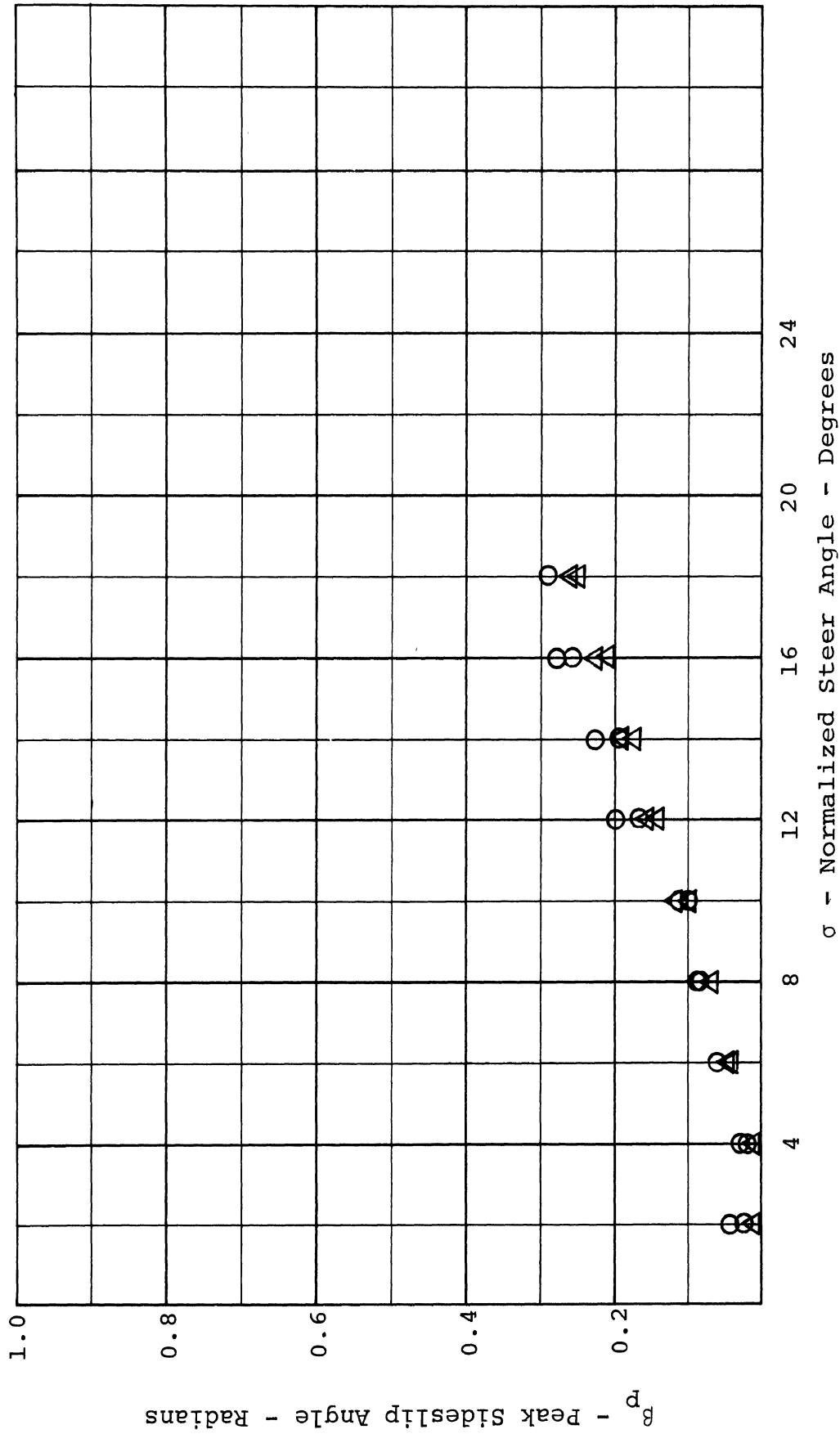
SINUSOIDAL STEER - 60 MPH - DODGE



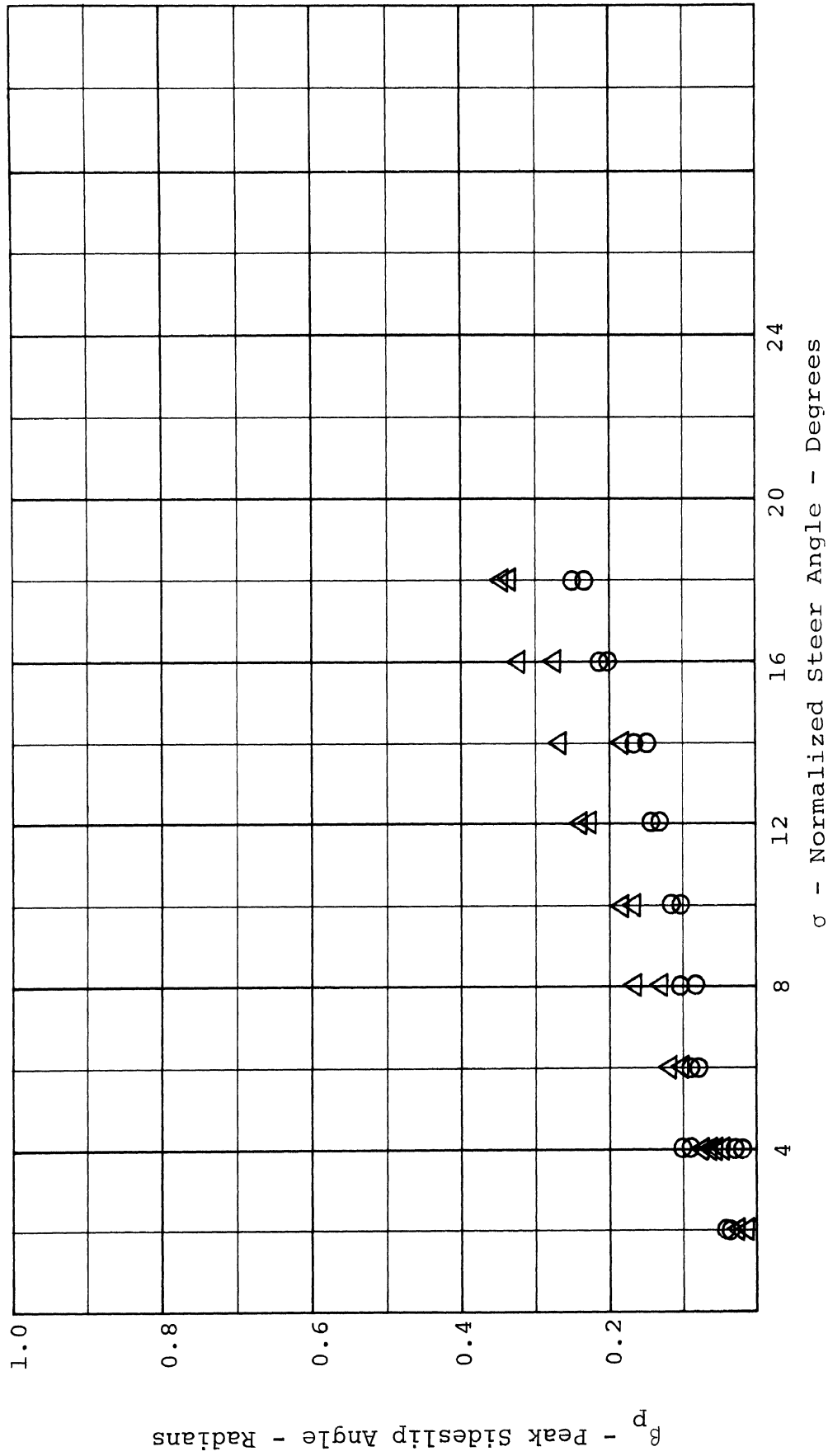
SINUSOIDAL STEER - 60 MPH - FIREBIRD



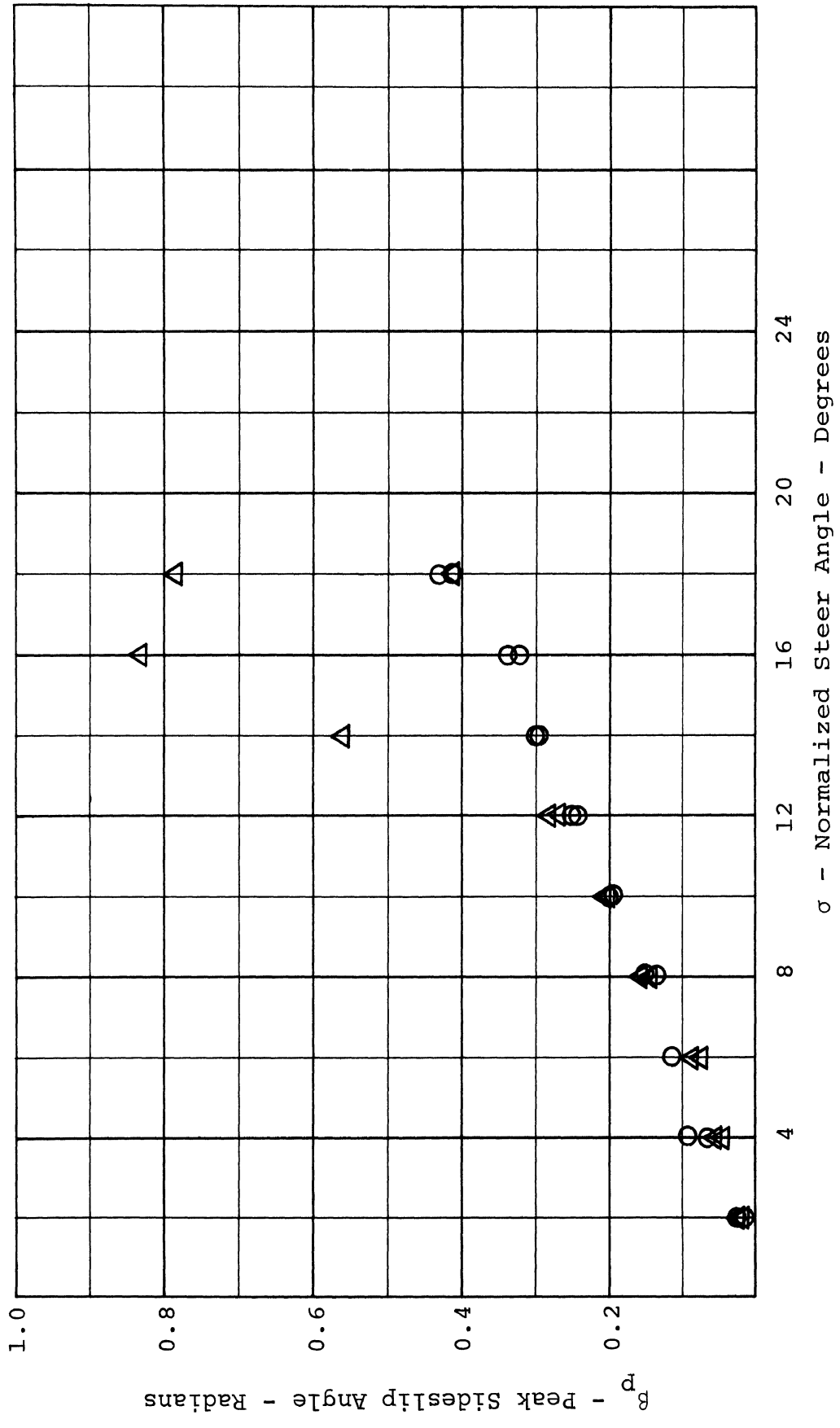
SINUSOIDAL STEER - 60 MPH - GALAXIE



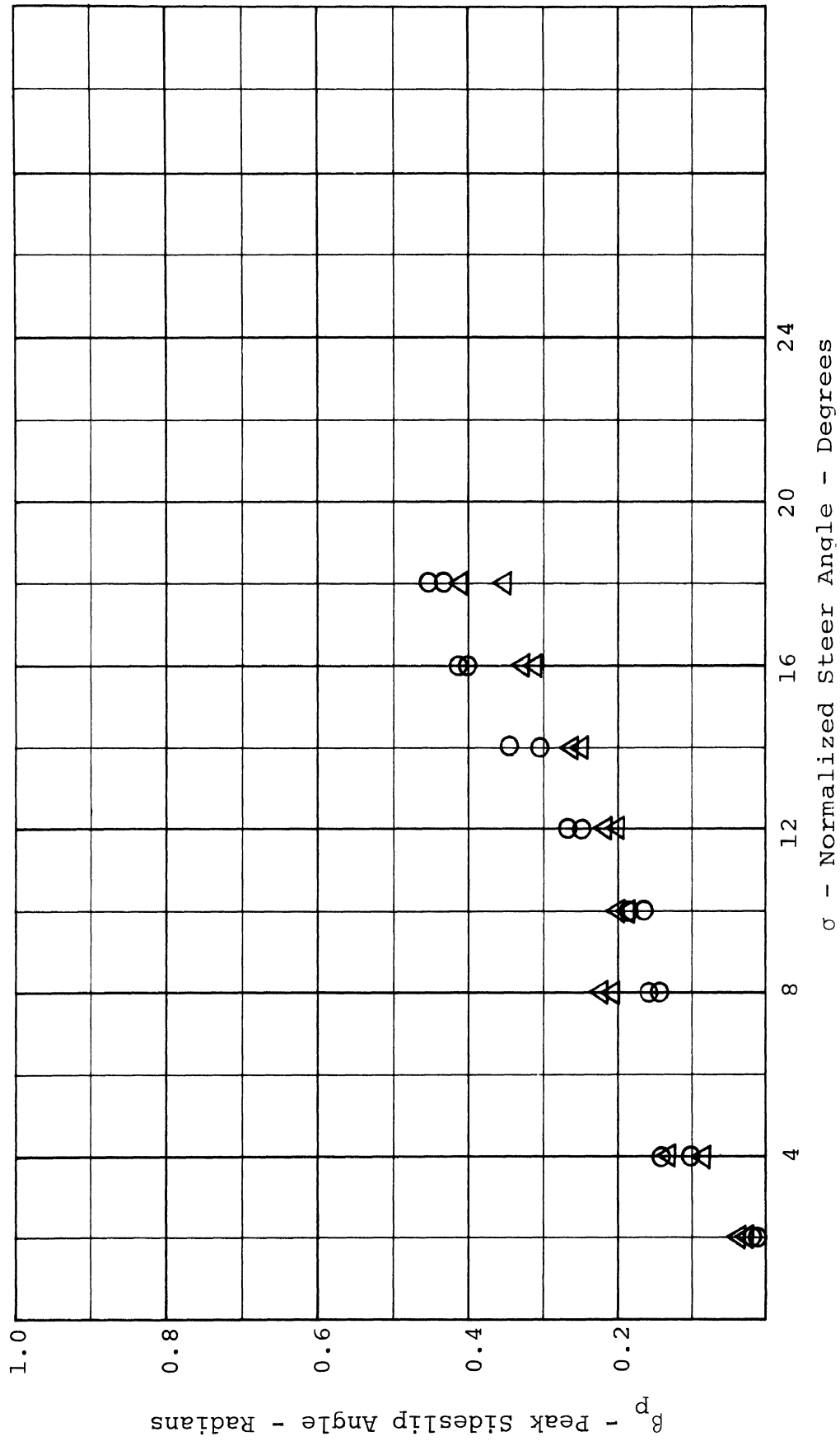
SINUSOIDAL STEER - 60 MPH - GREMLIN



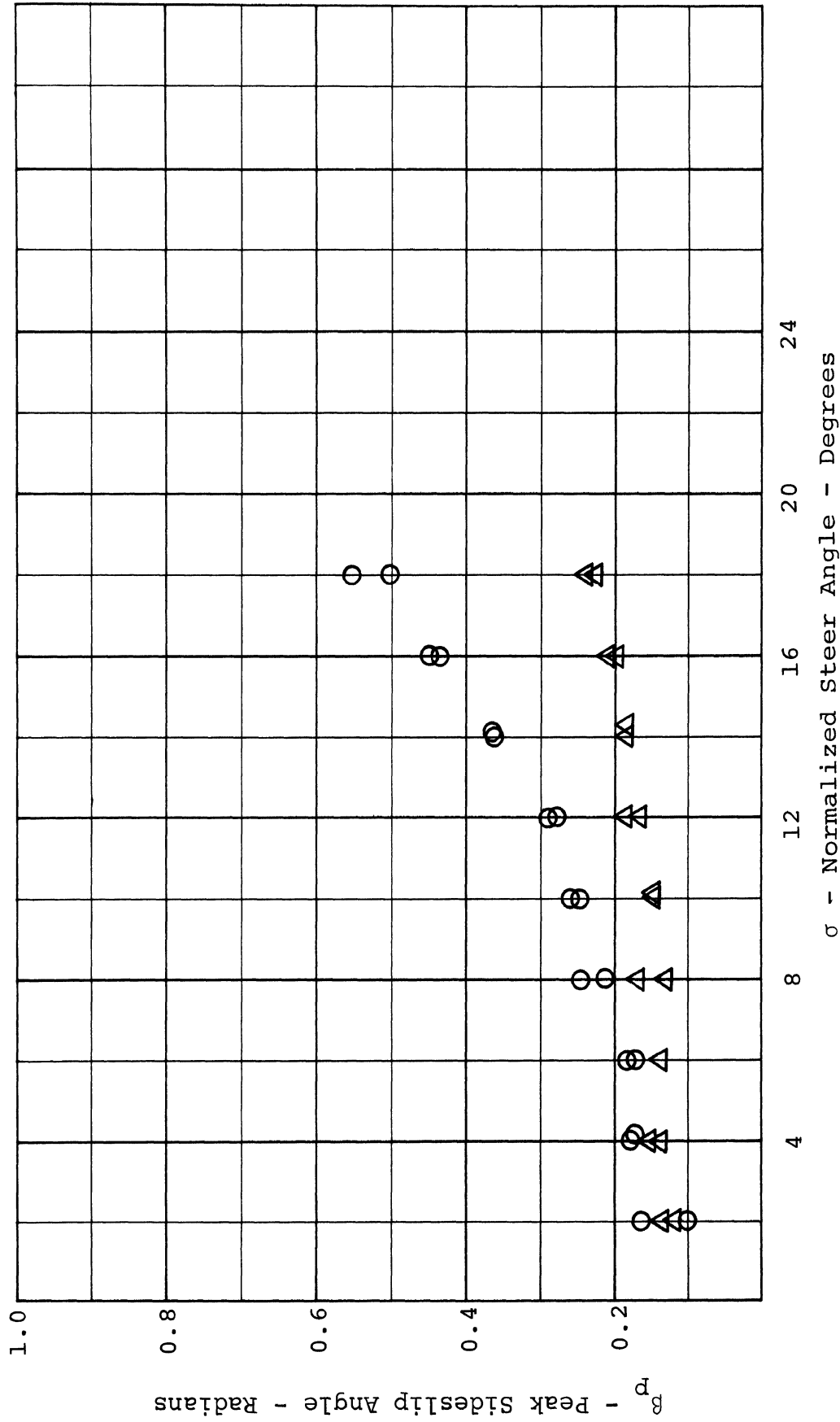
SINUSOIDAL STEER - 60 MPH - IMPERIAL



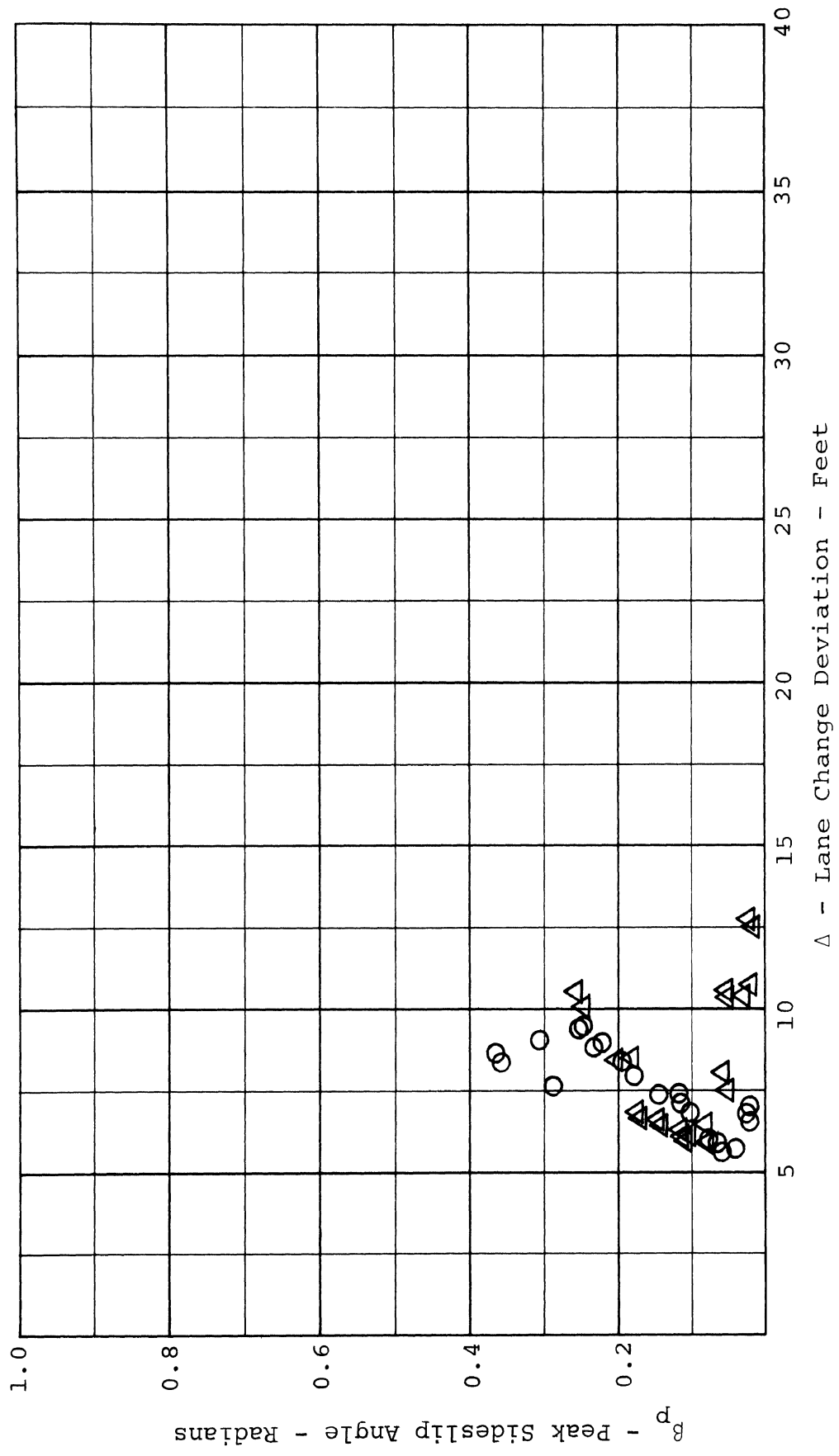
SINUSOIDAL STEER - 60 MPH - LOTUS



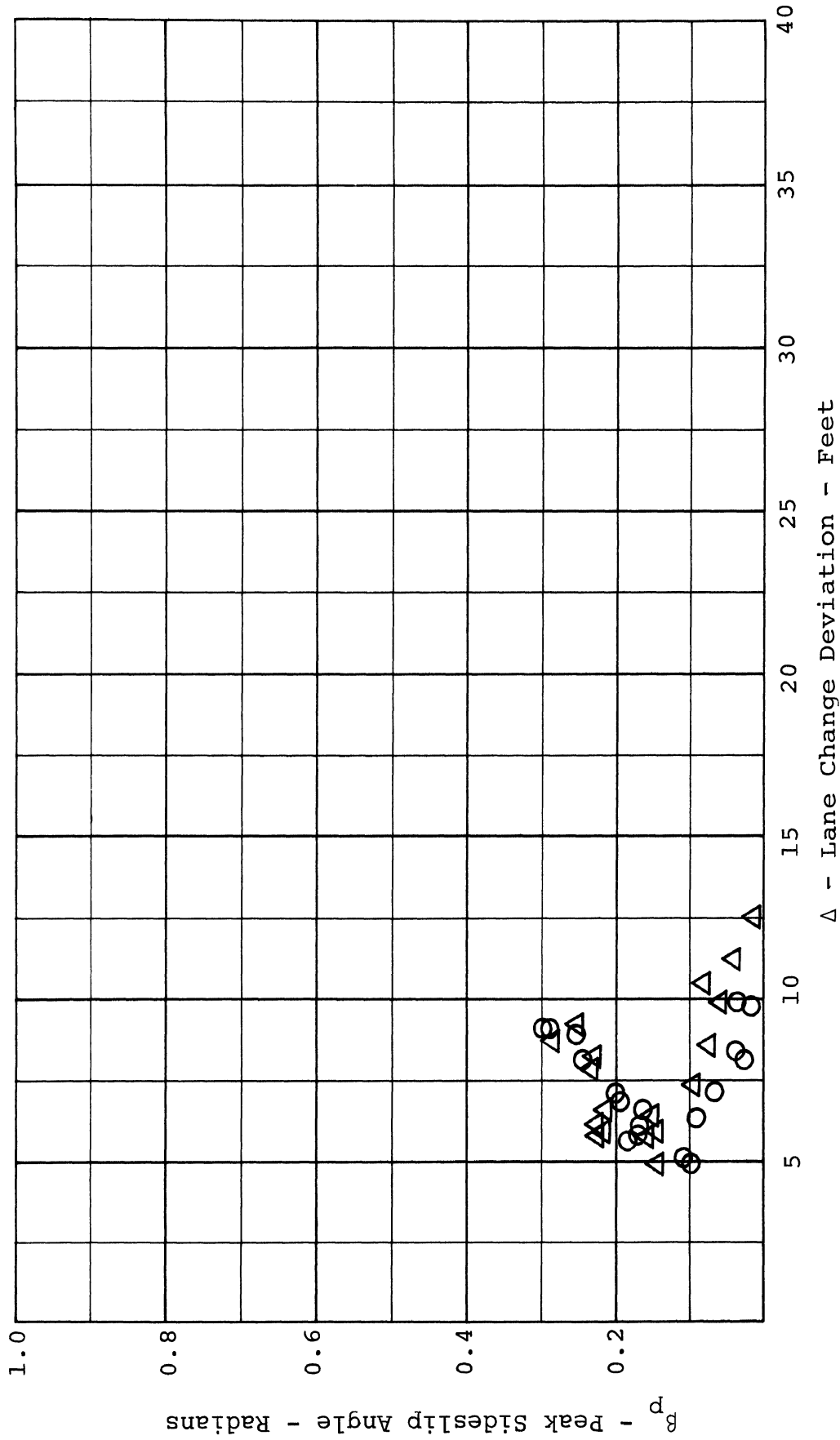
SINUSOIDAL STEER - 60 MPH - MERCEDES



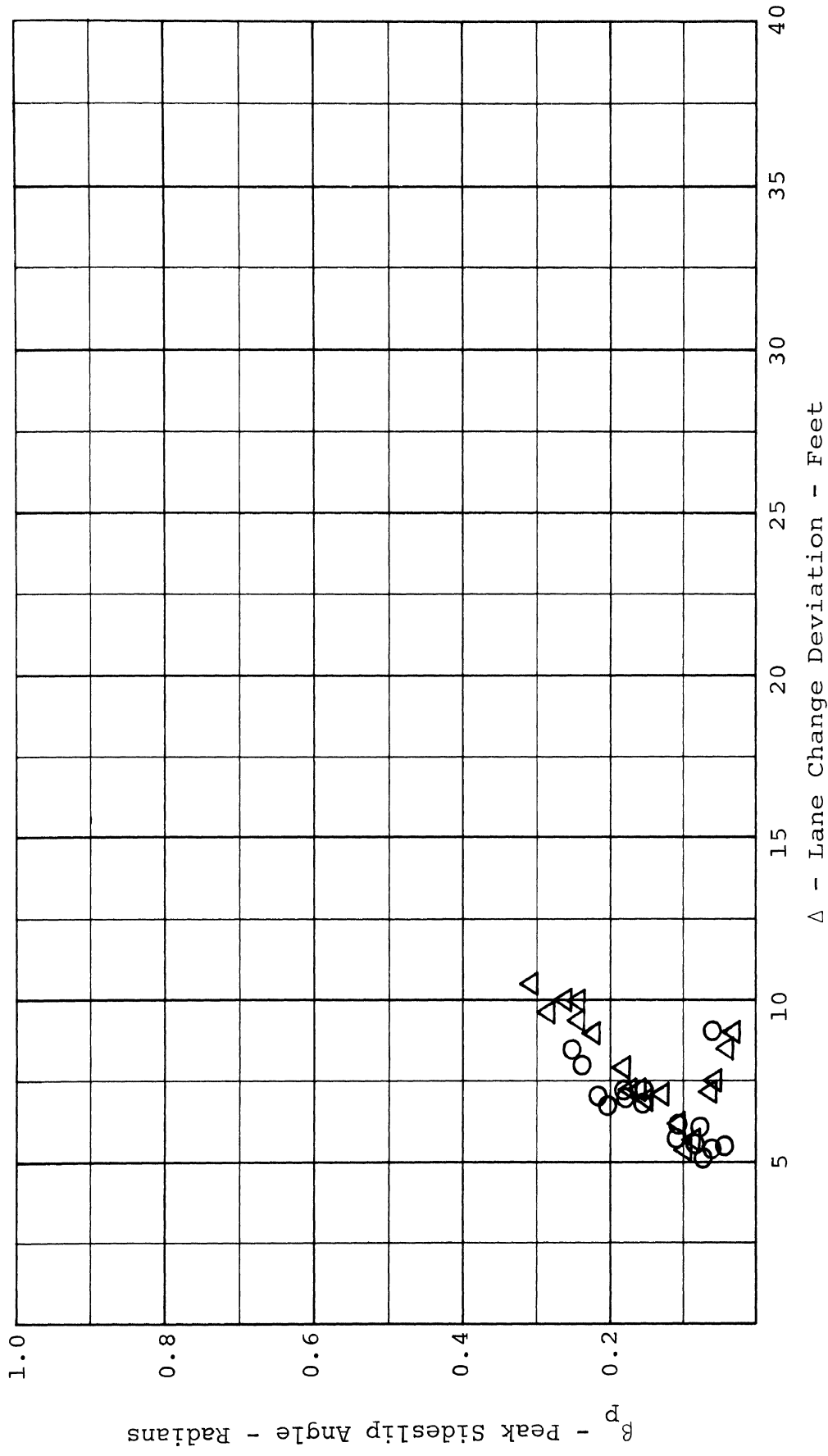
SINUSOIDAL STEER - 60 MPH - TORONADO



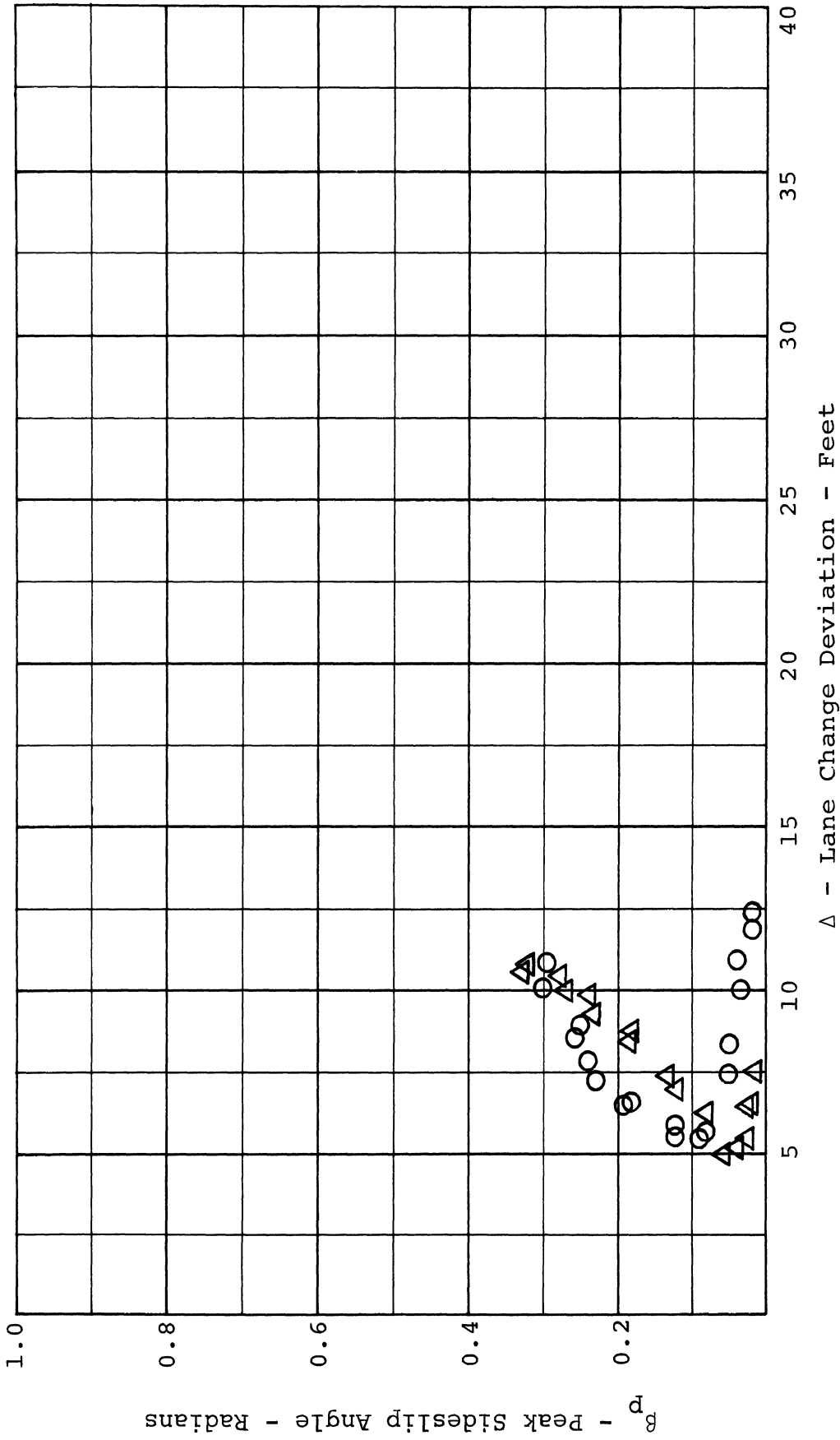
SINUSOIDAL STEER - 45 MPH - AMBASSADOR



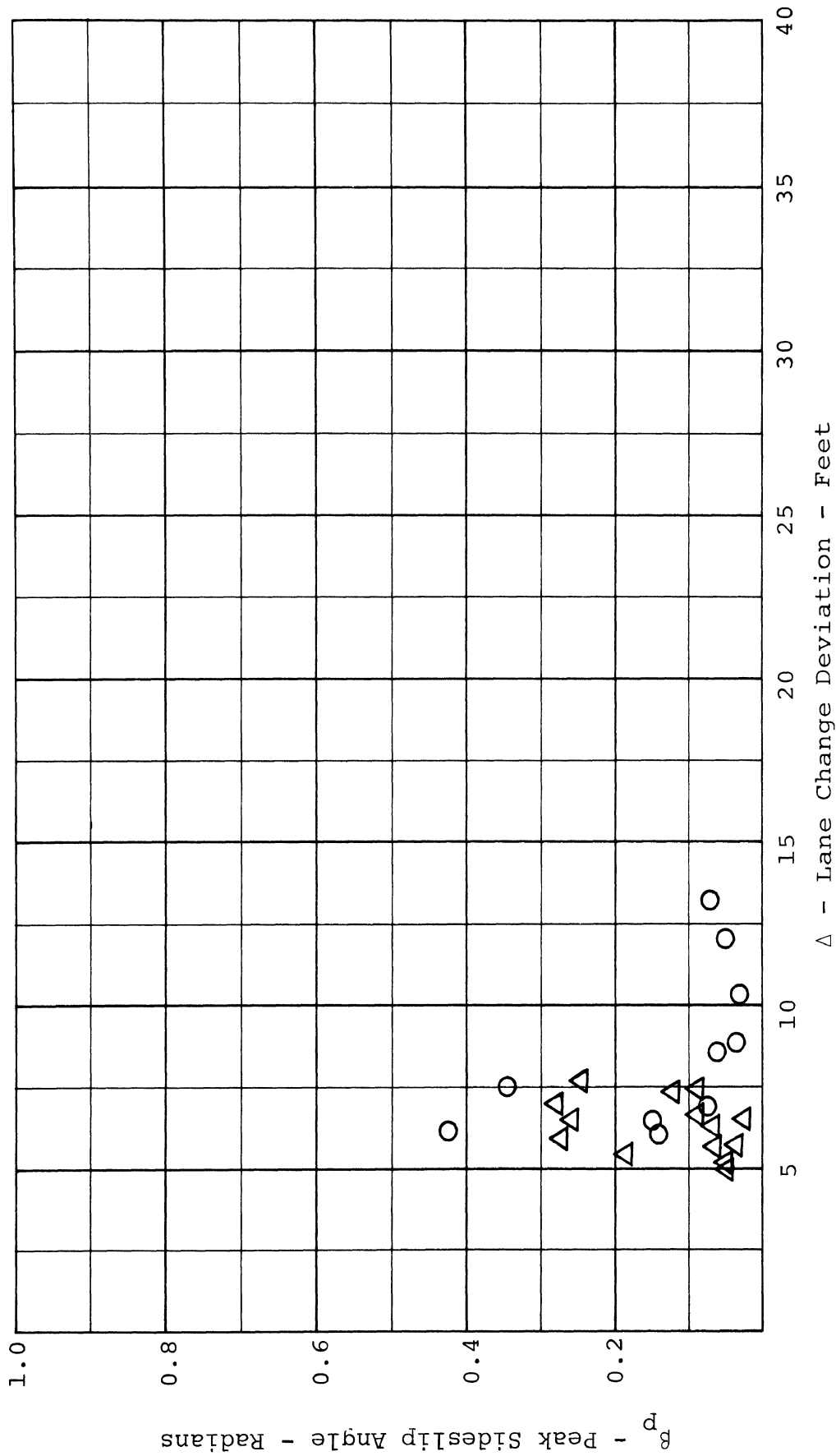
SINUSOIDAL STEER - 45 MPH - AUSTIN



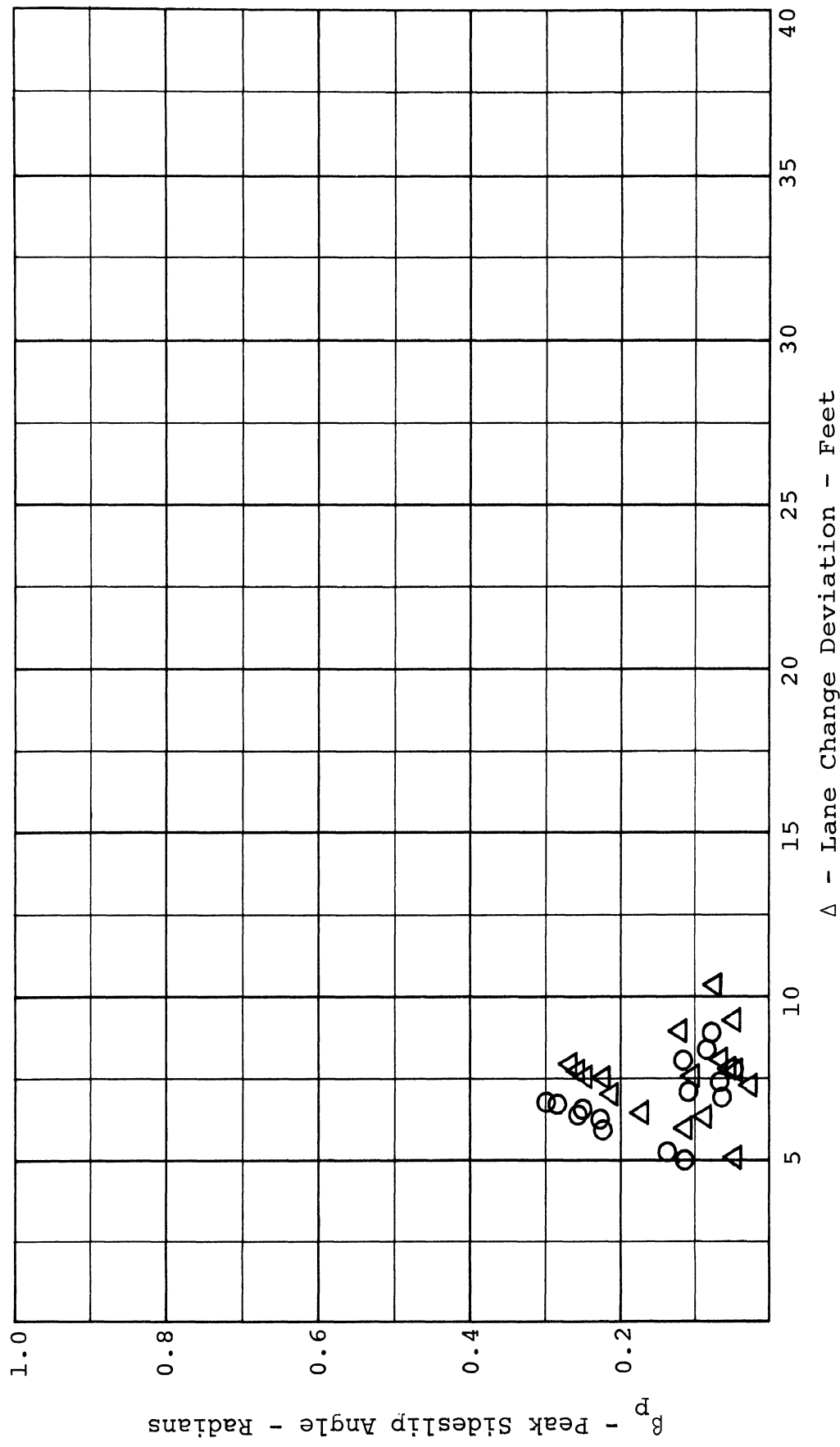
SINUSOIDAL STEER - 45 MPH - BROOKWOOD



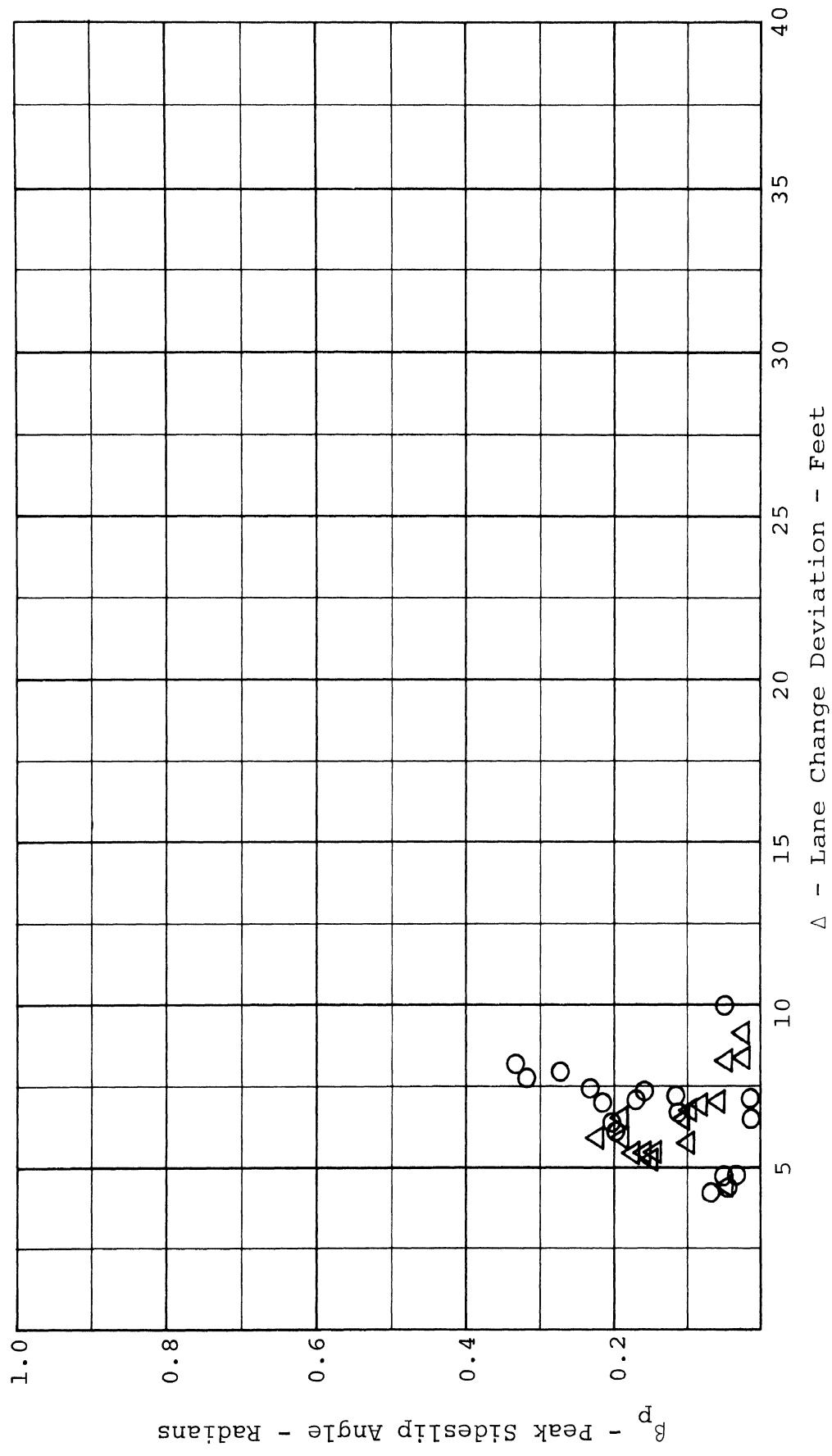
SINUSOIDAL STEER - 45 MPH - DODGE



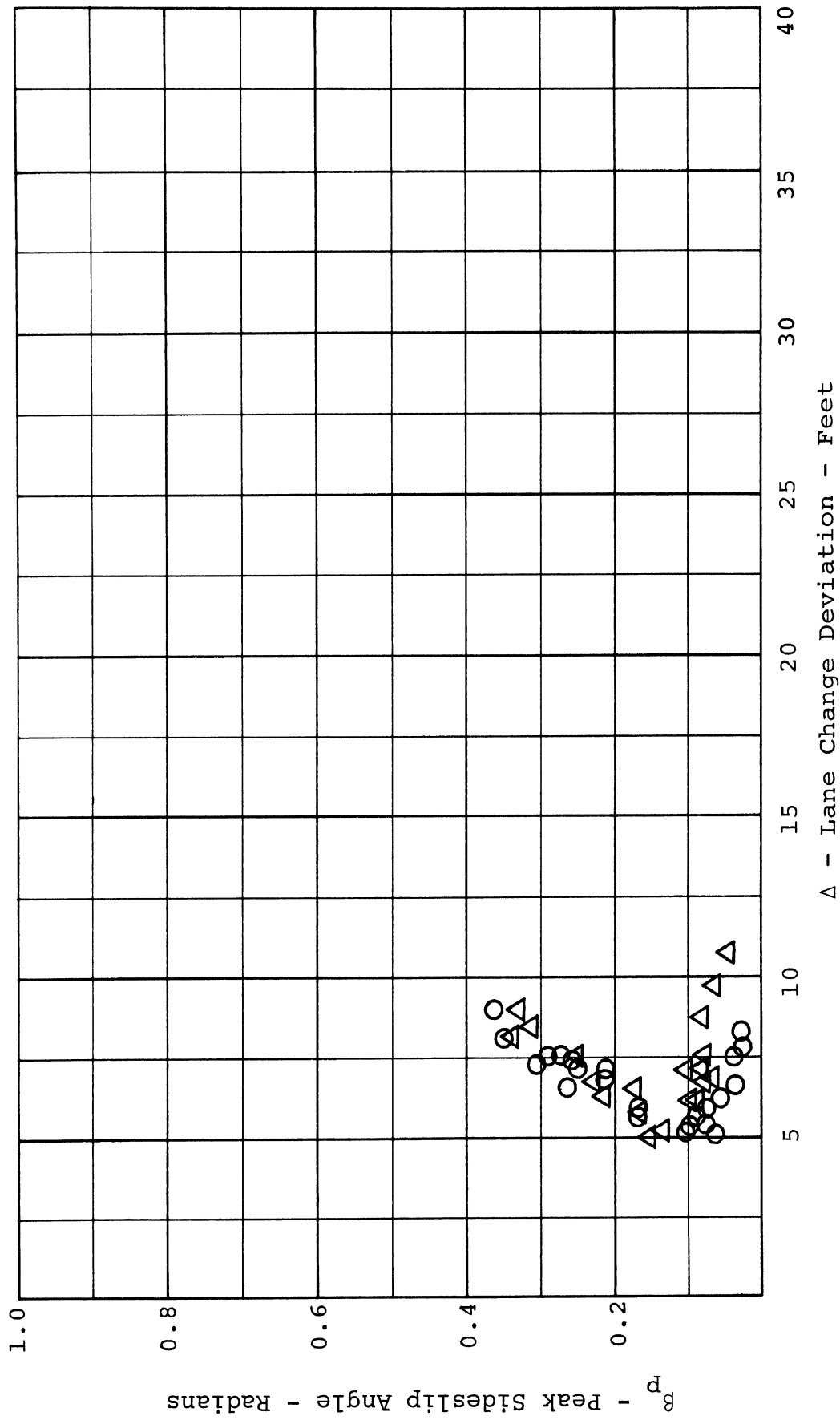
SINUSOIDAL STEER - 45 MPH - FIREBIRD



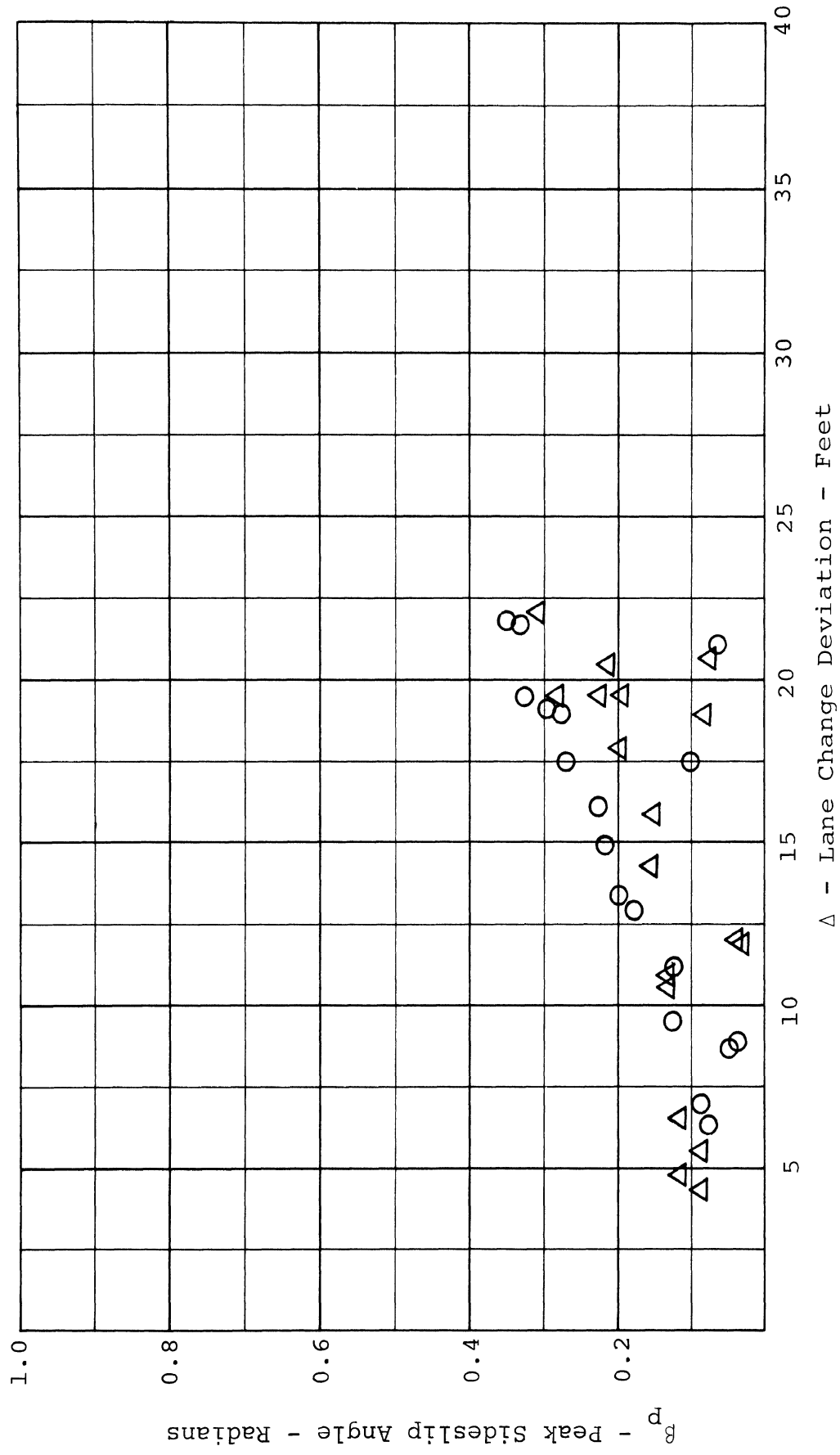
SINUSOIDAL STEER - 45 MPH - GALAXIE



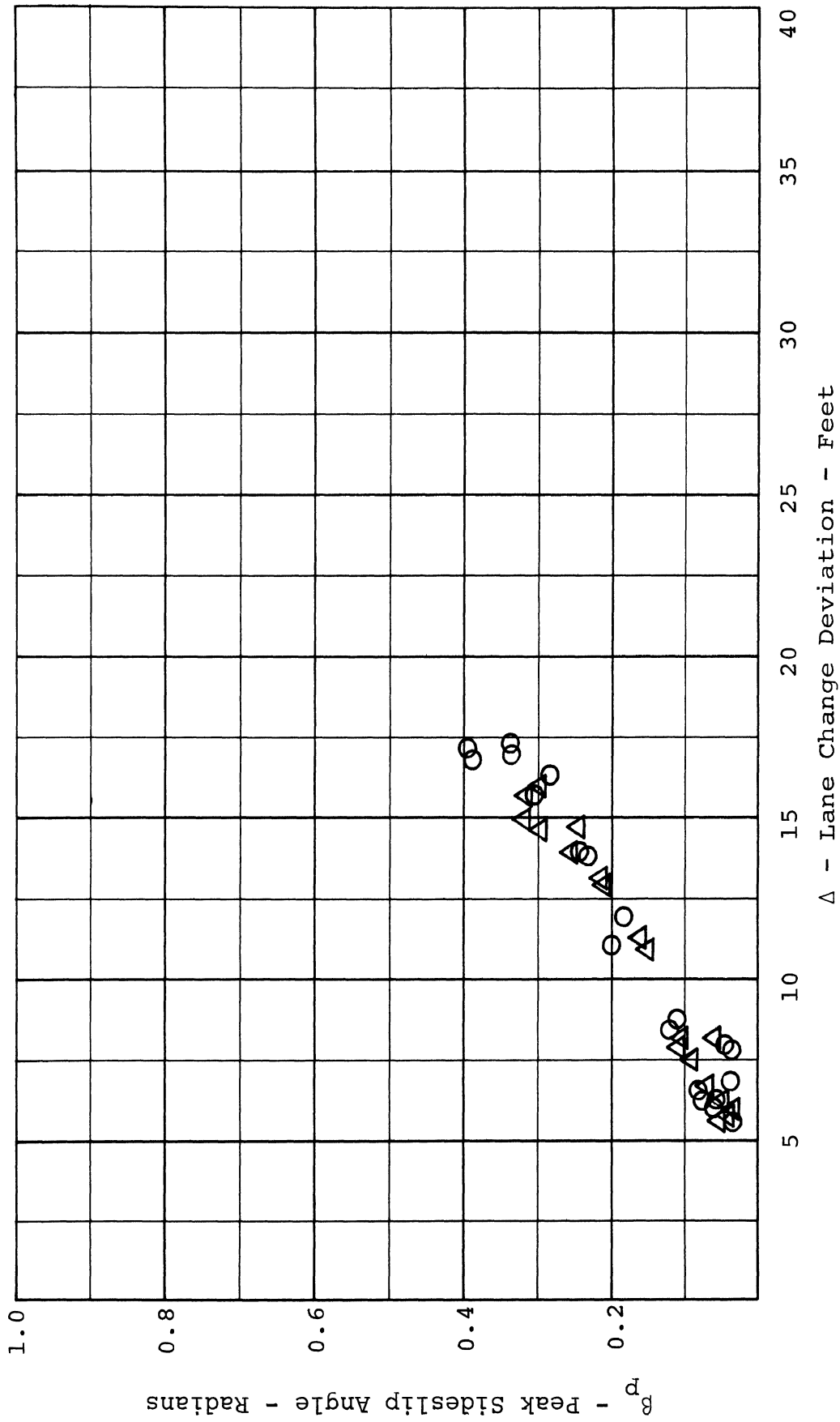
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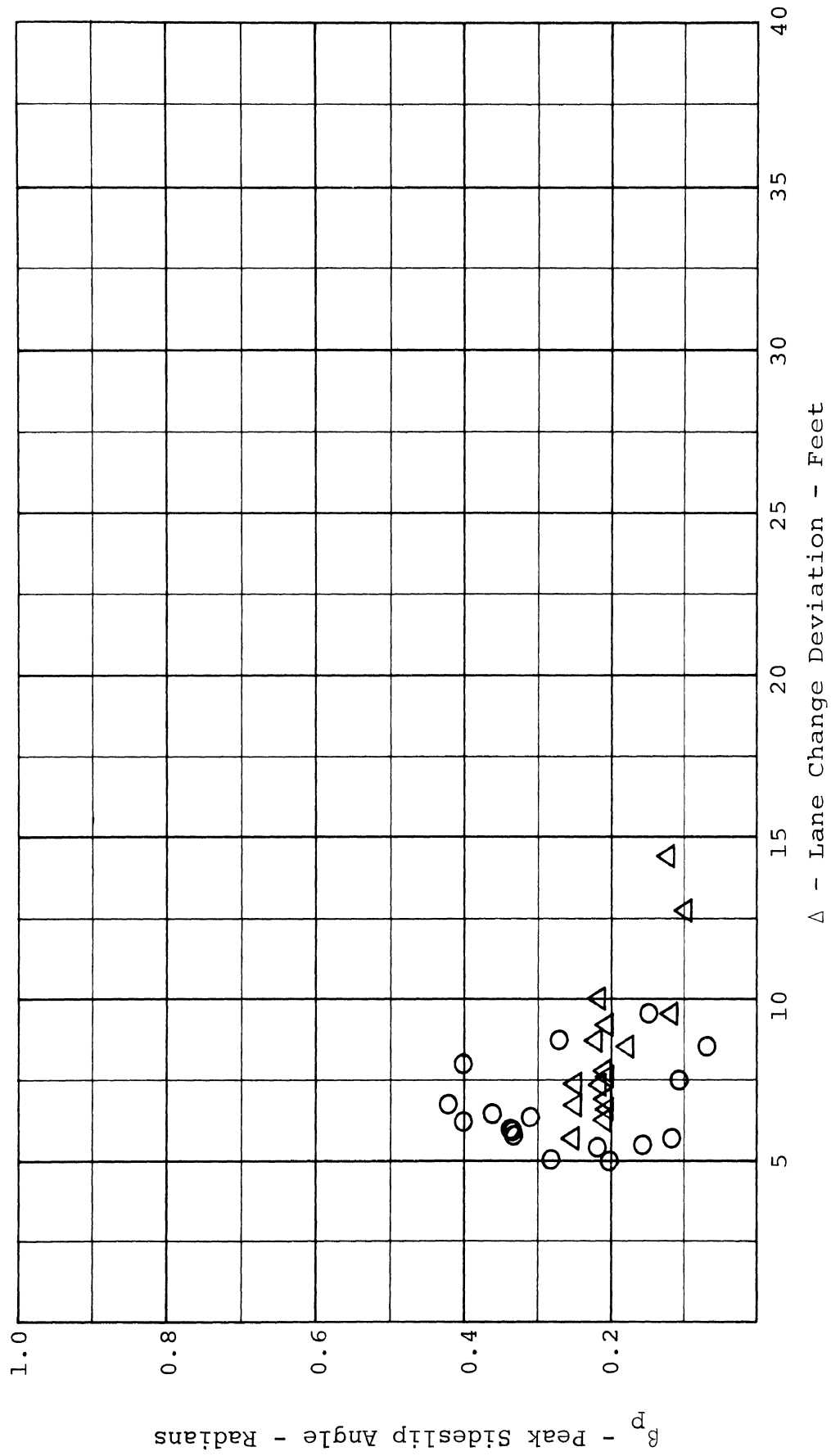
SINUSOIDAL STEER - 45 MPH - IMPERIAL



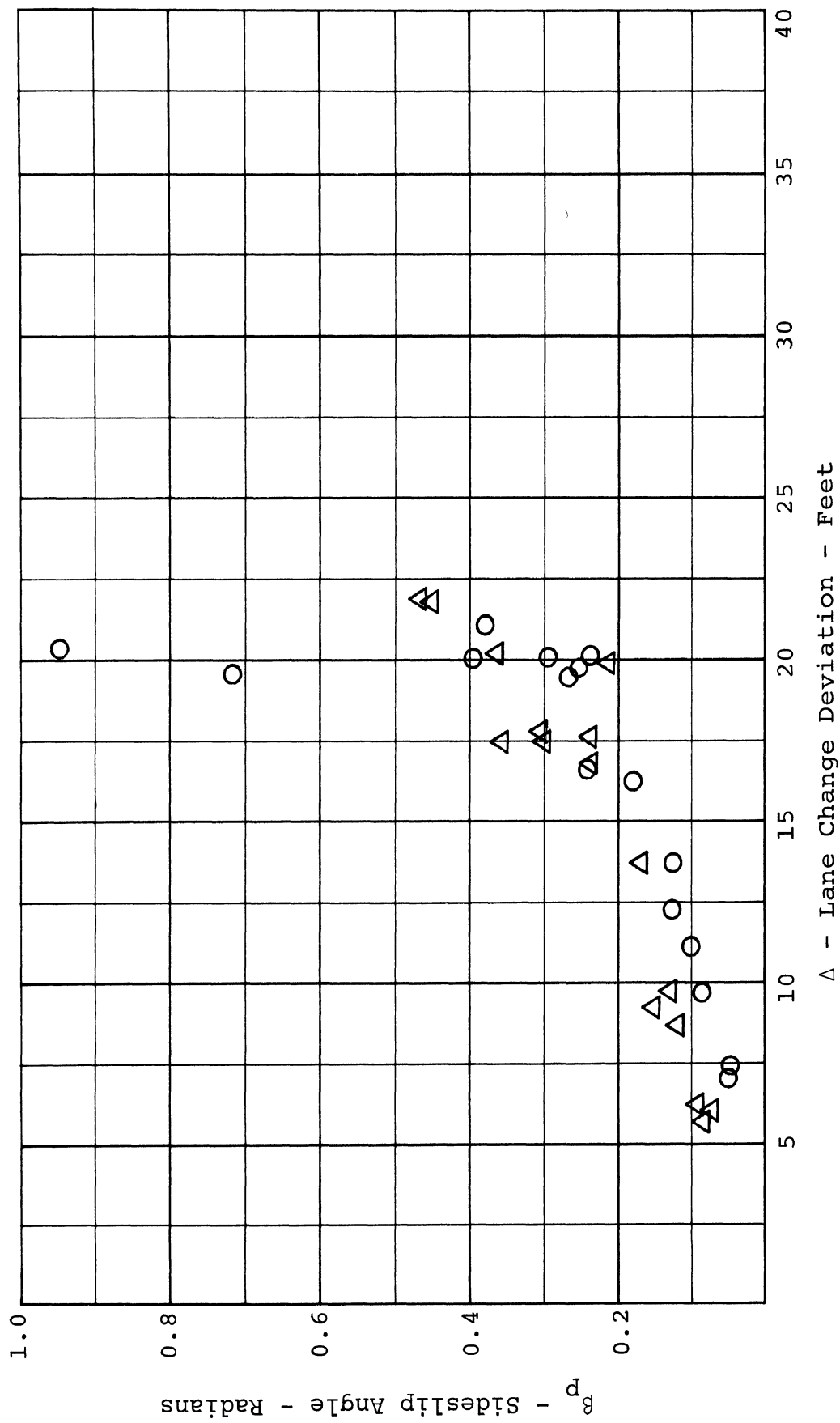
SINUSOIDAL STEER - 45 MPH - LOTUS



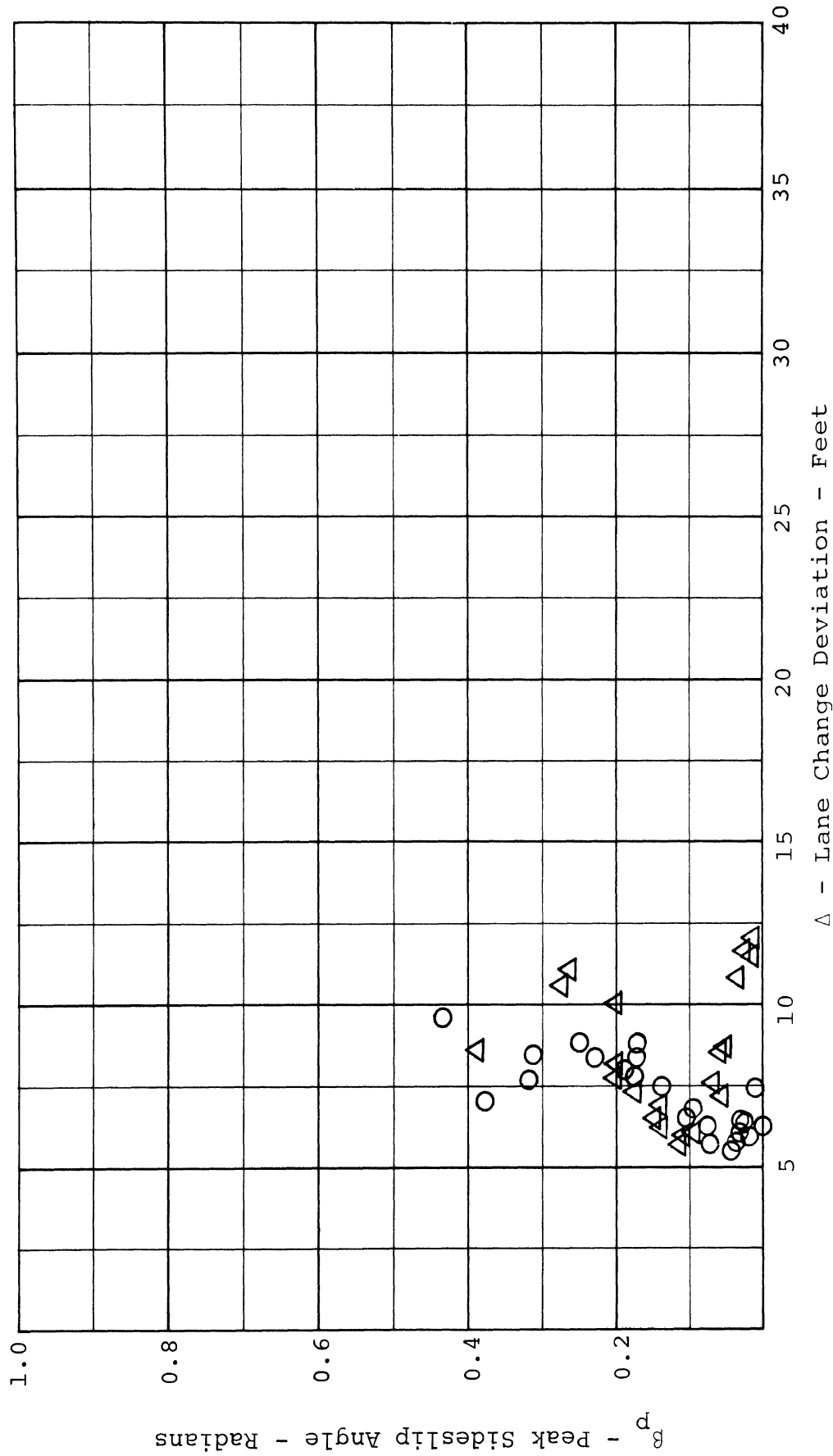
SINUSOIDAL STEER - 45 MPH - MERCEDES



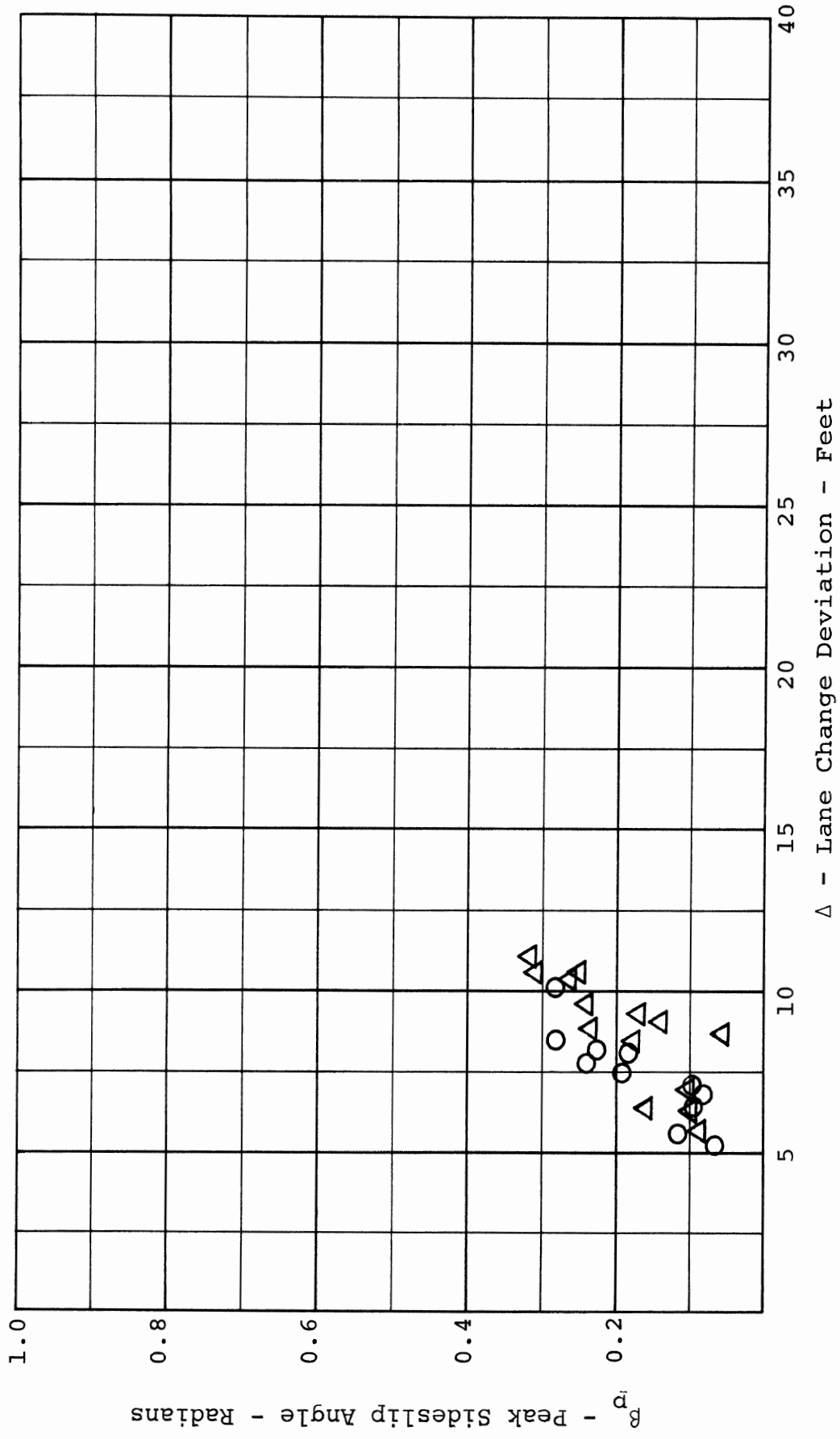
SINUSOIDAL STEER - 45 MPH - TORONADO



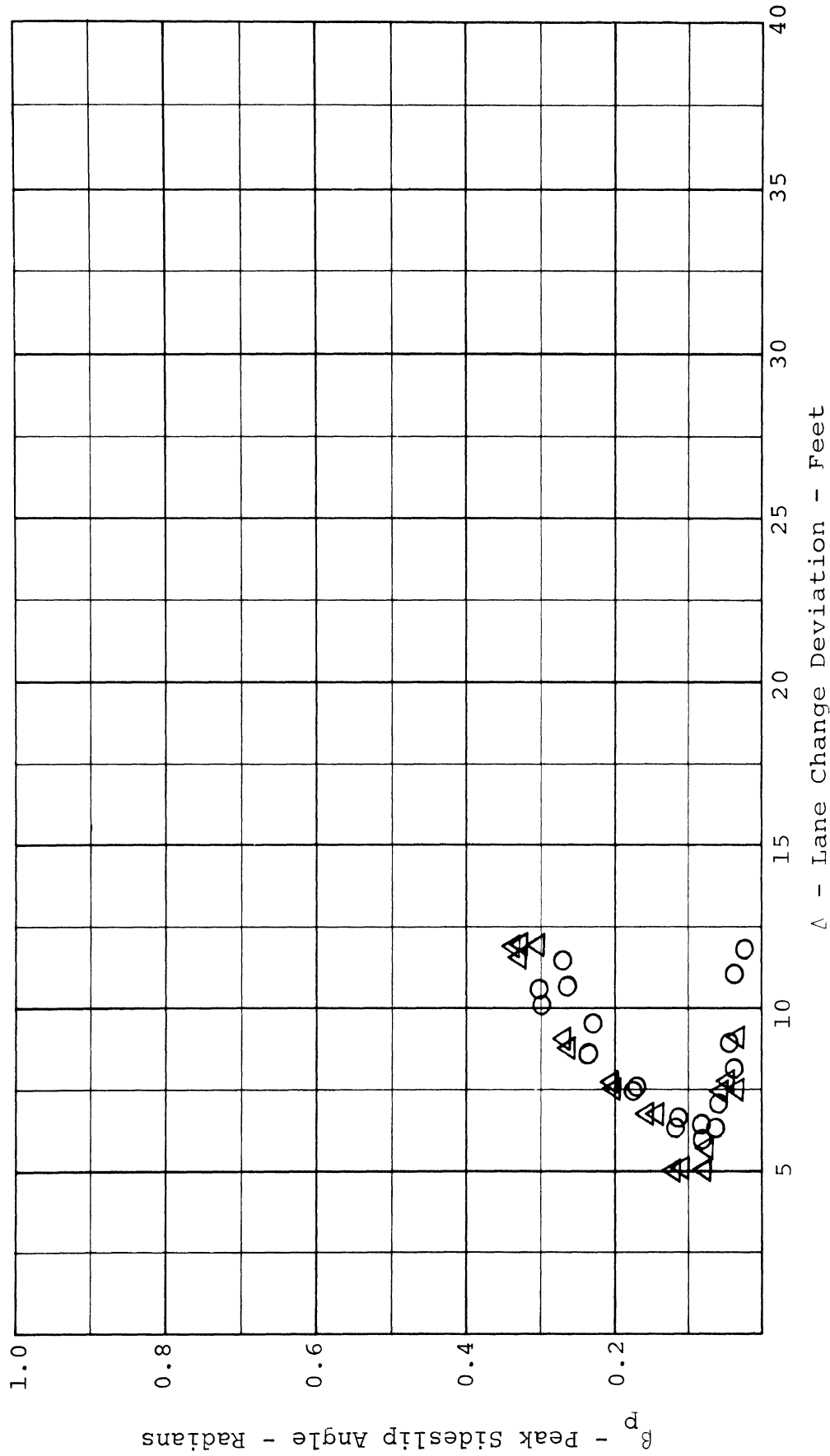
SINUSOIDAL STEER - 45 MPH - VW



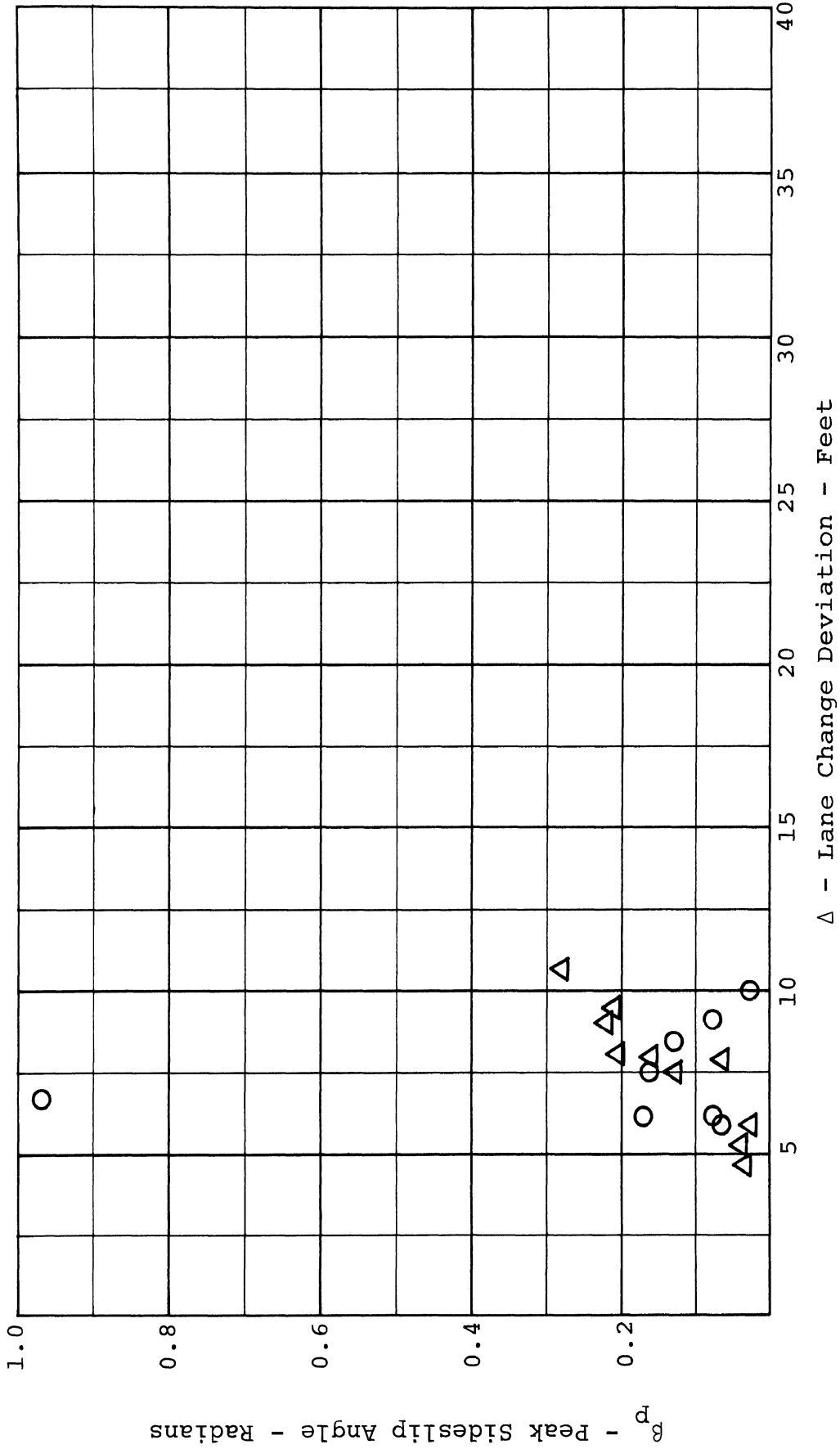
SINUSOIDAL STEER - 60 MPH - AMBASSADOR



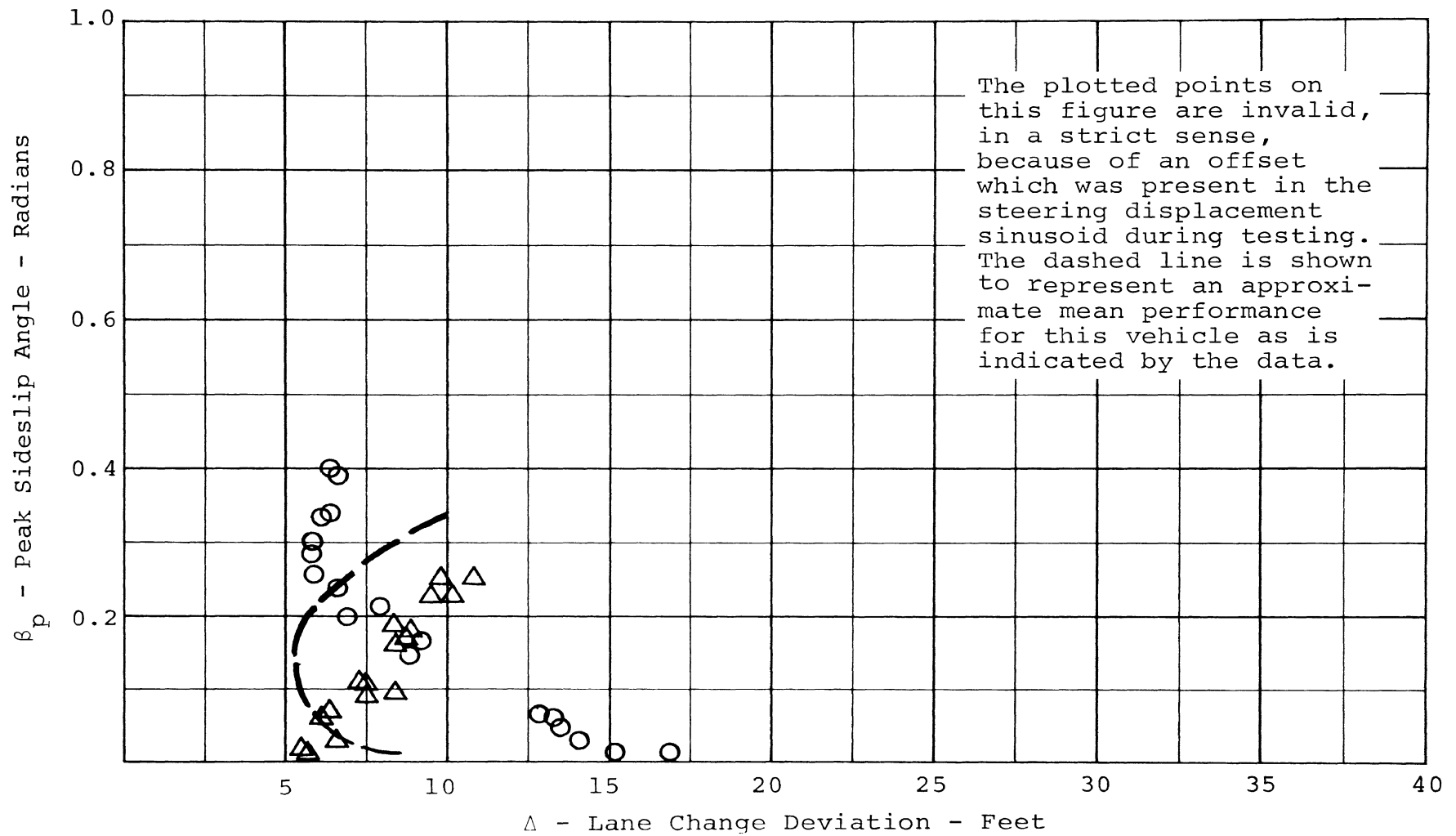
SINUSOIDAL STEER - 60 MPH - BROOKWOOD



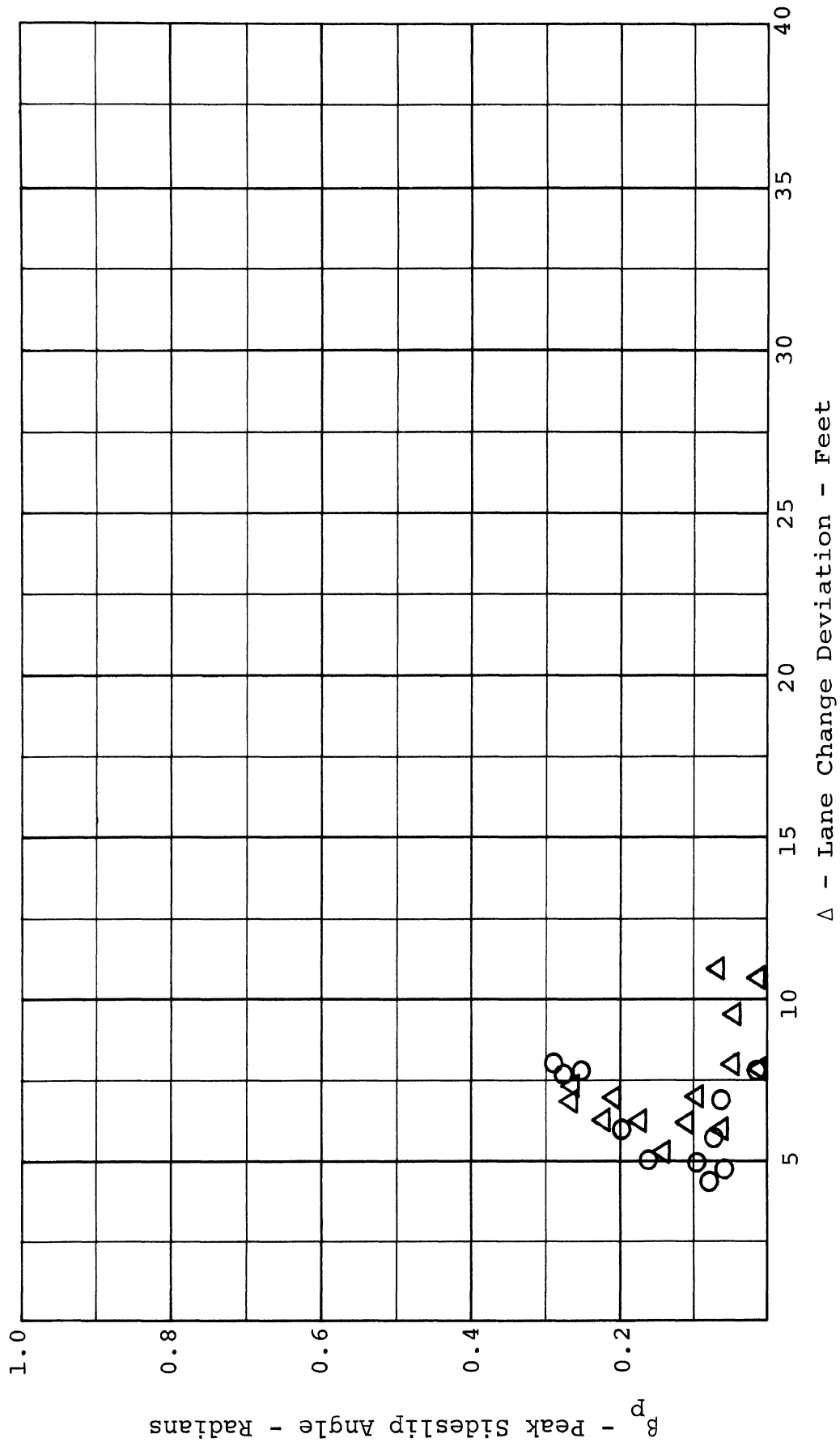
SINUSOIDAL STEER - 60 MPH - DODGE



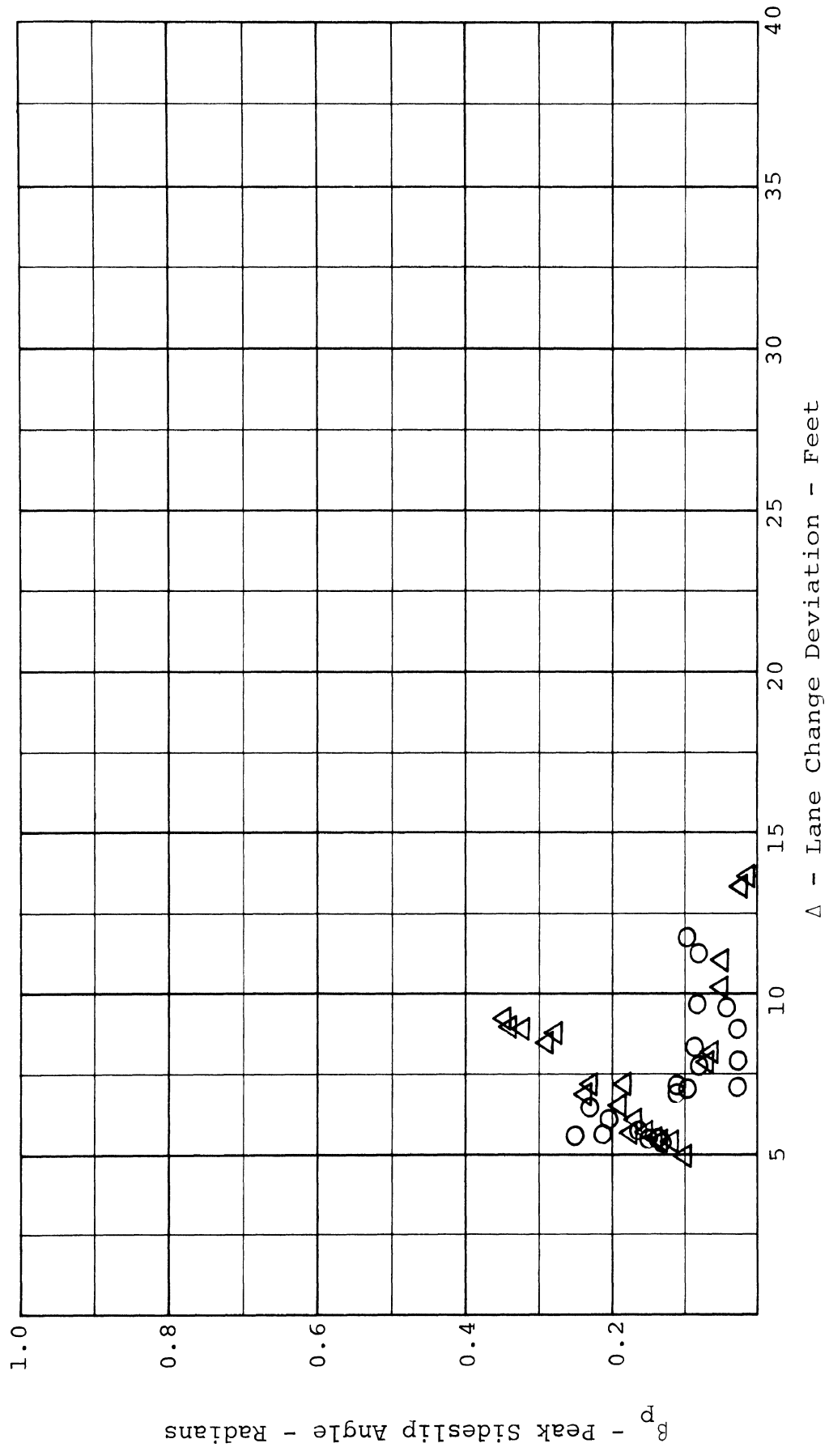
SINUSOIDAL STEER - 60 MPH - FIREBIRD



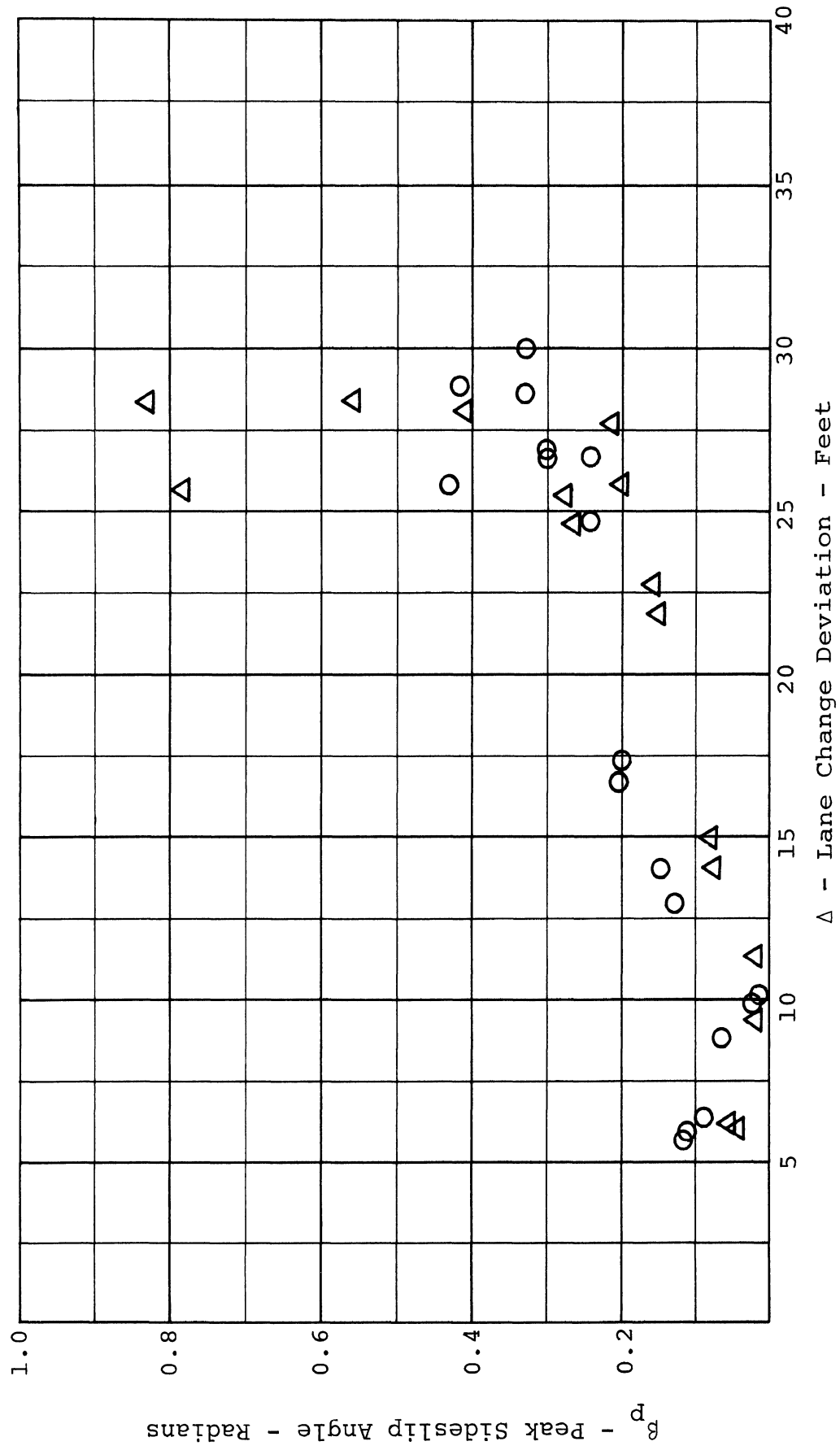
SINUSOIDAL STEER - 60 MPH - GALAXIE



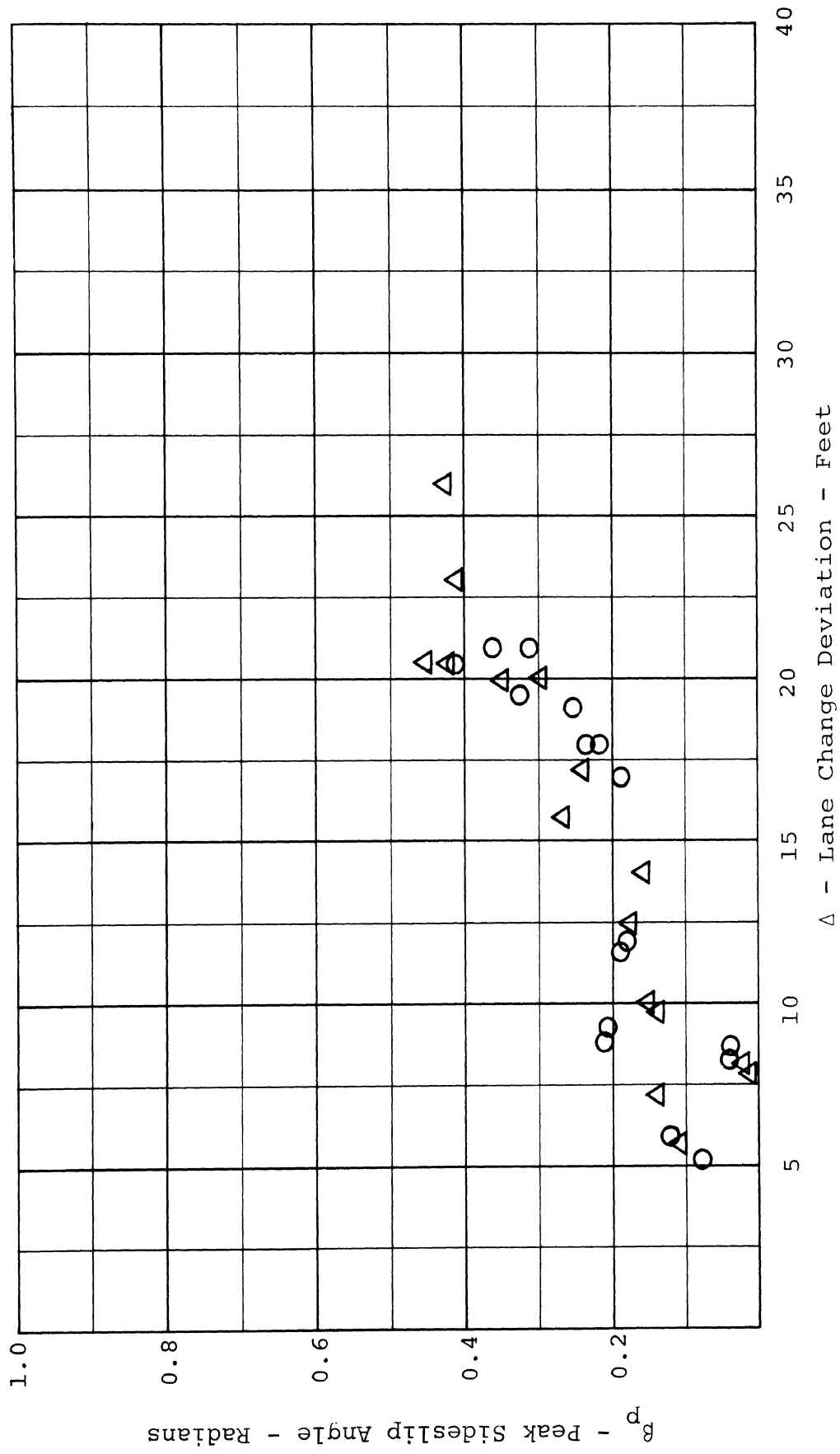
SINUSOIDAL STEER - 60 MPH - GREMLIN



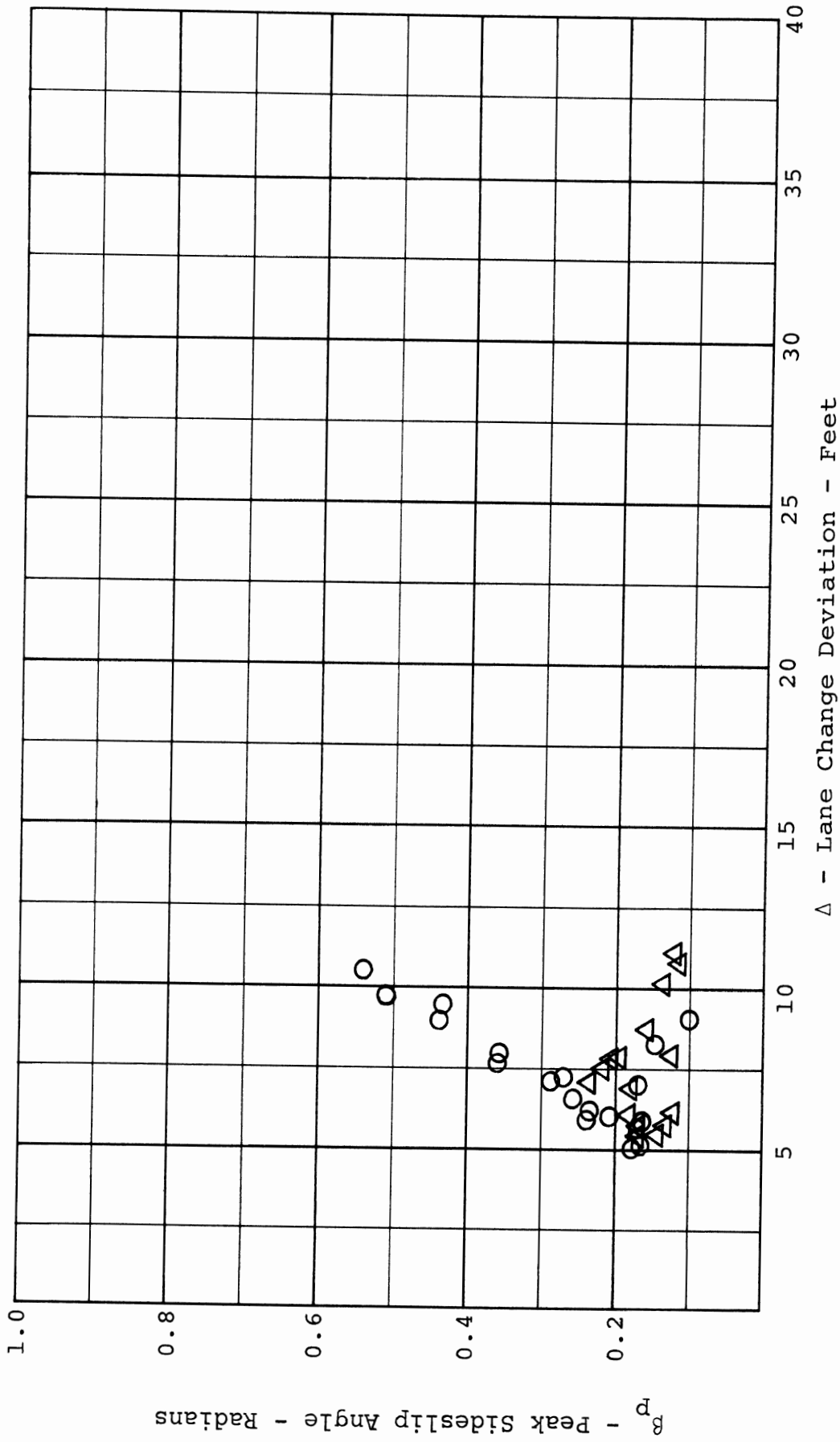
SINUSOIDAL STEER - 60 MPH - IMPERIAL



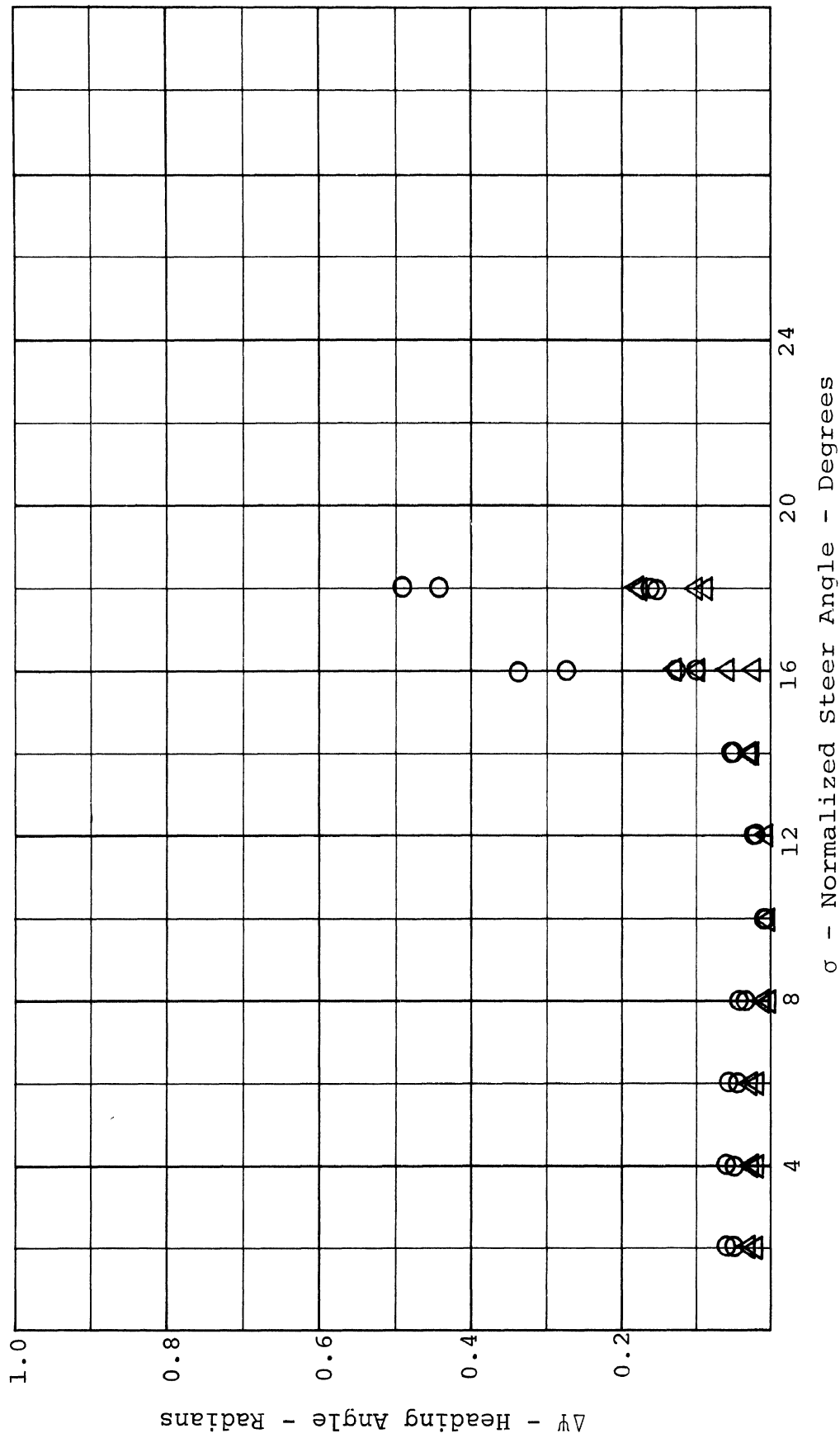
SINUSOIDAL STEER - 60 MPH - LOTUS



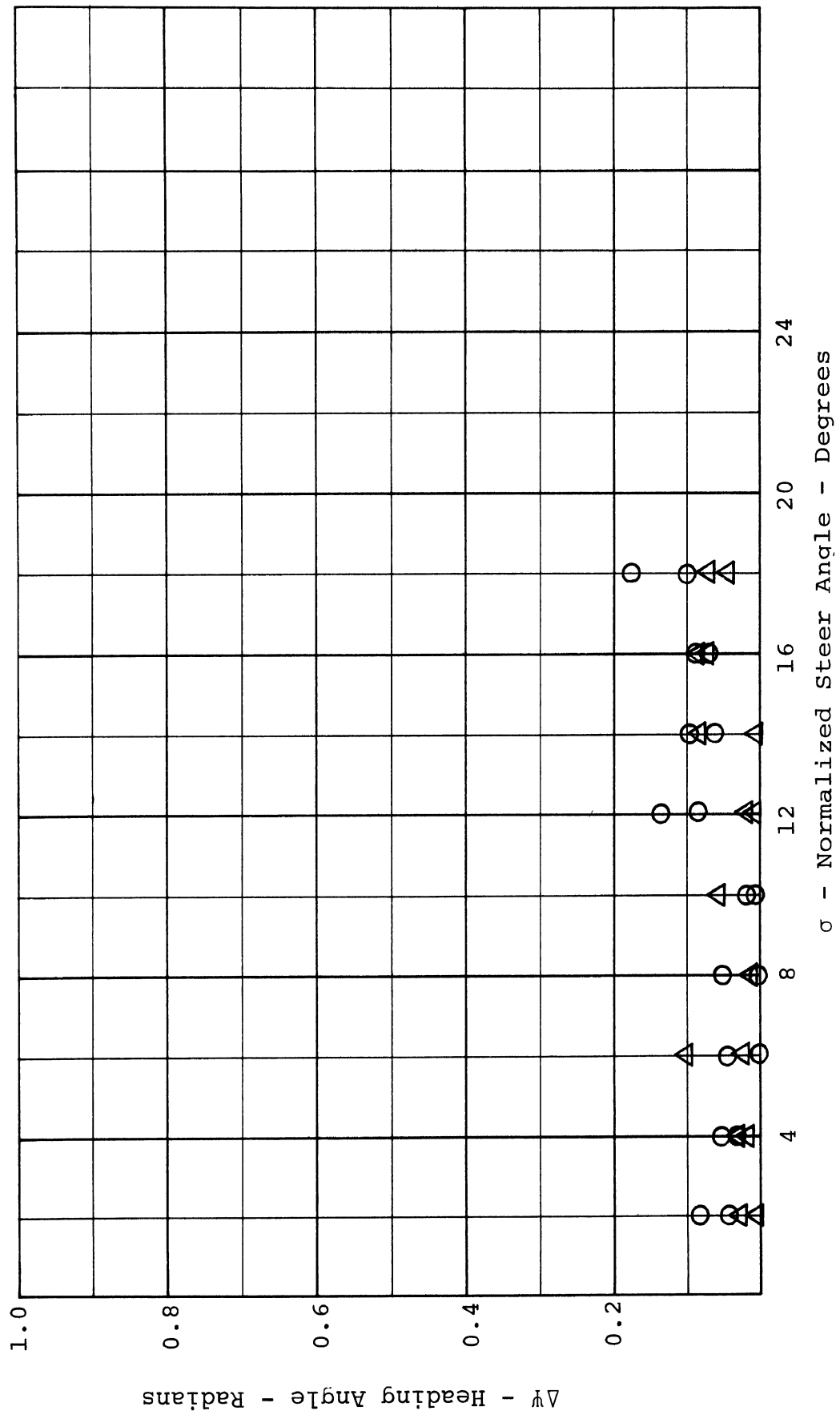
SINUSOIDAL STEER - 60 MPH - MERCEDES



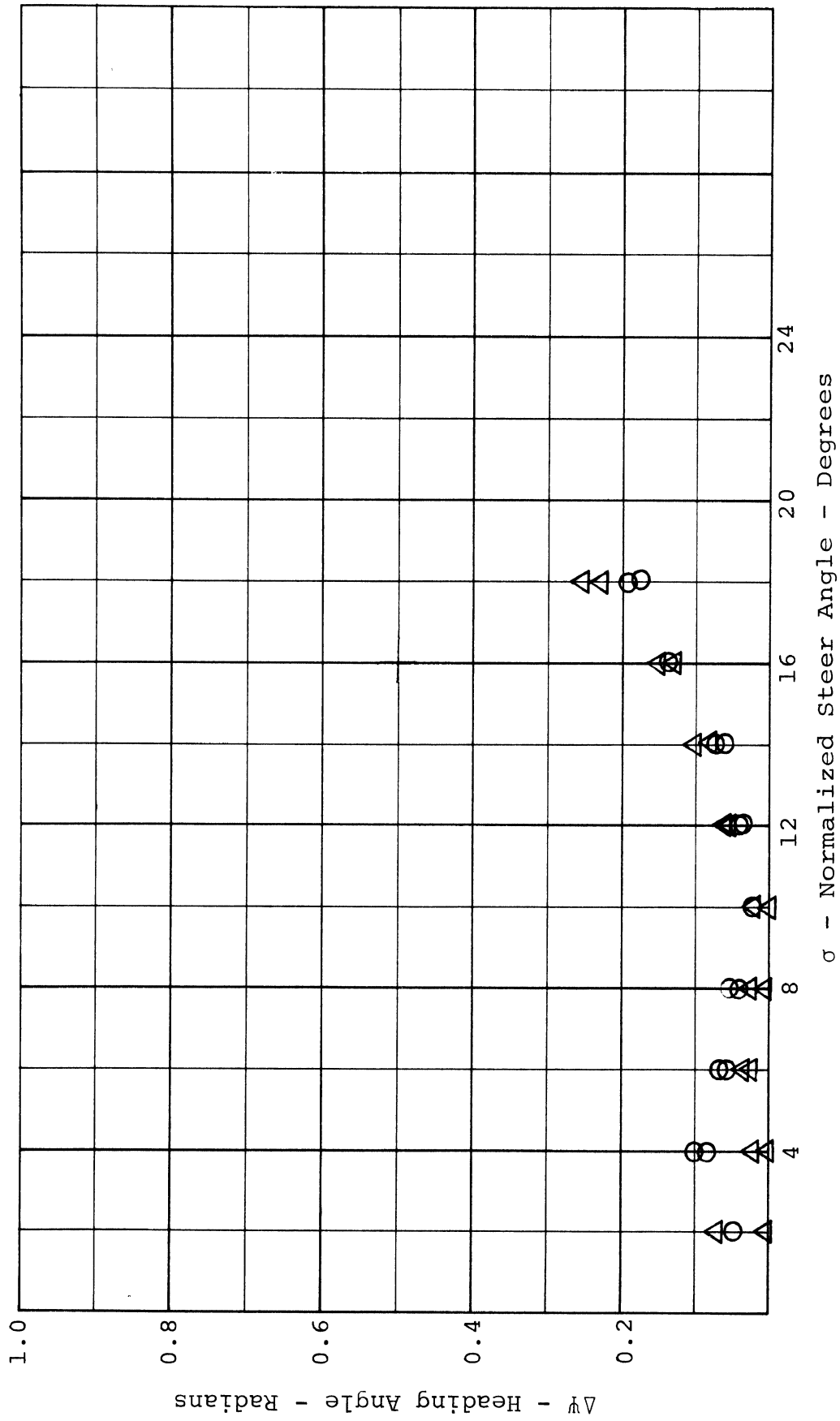
SINUSOIDAL STEER - 60 MPH - TORONADO



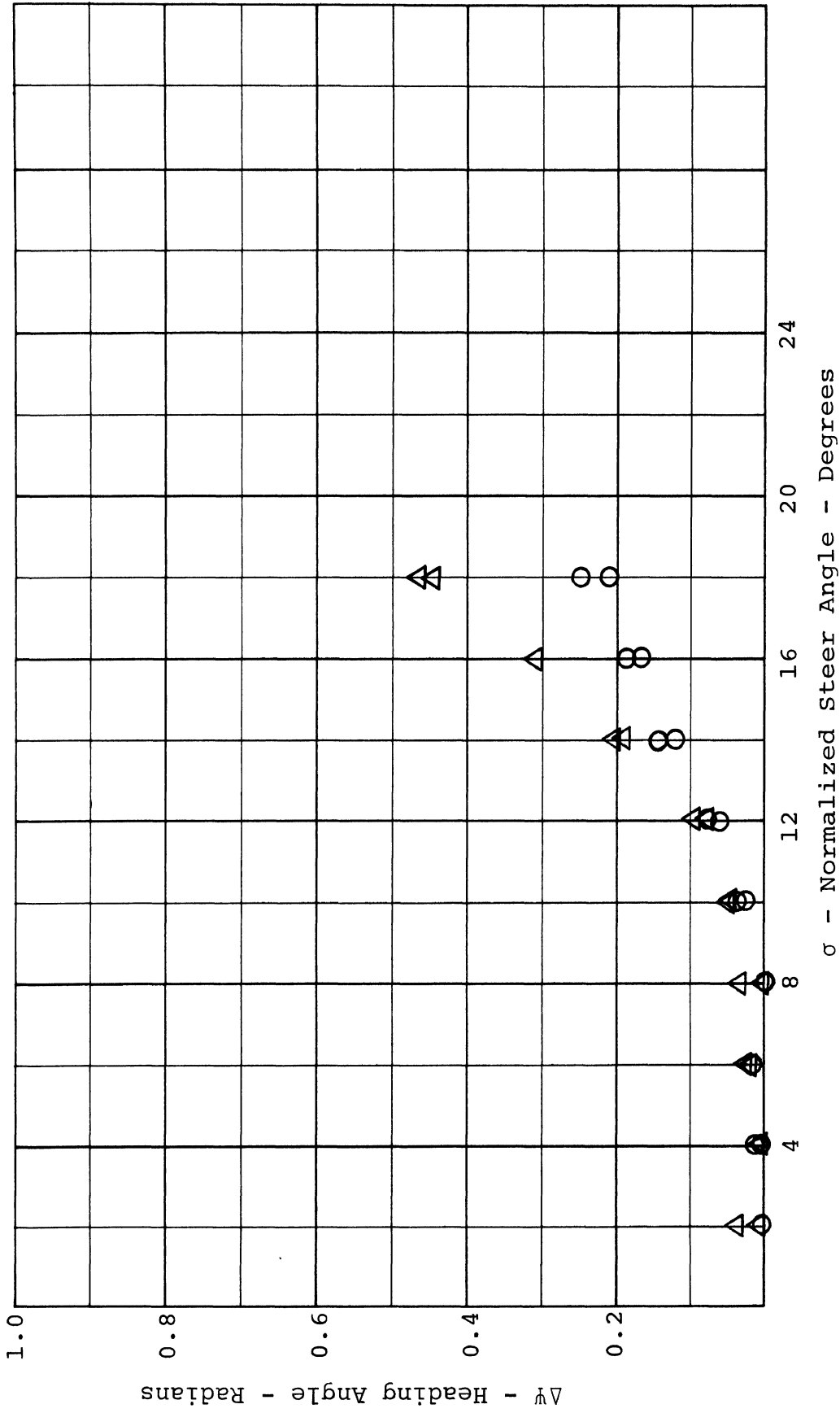
SINUSOIDAL STEER - 45 MPH - AMBASSADOR



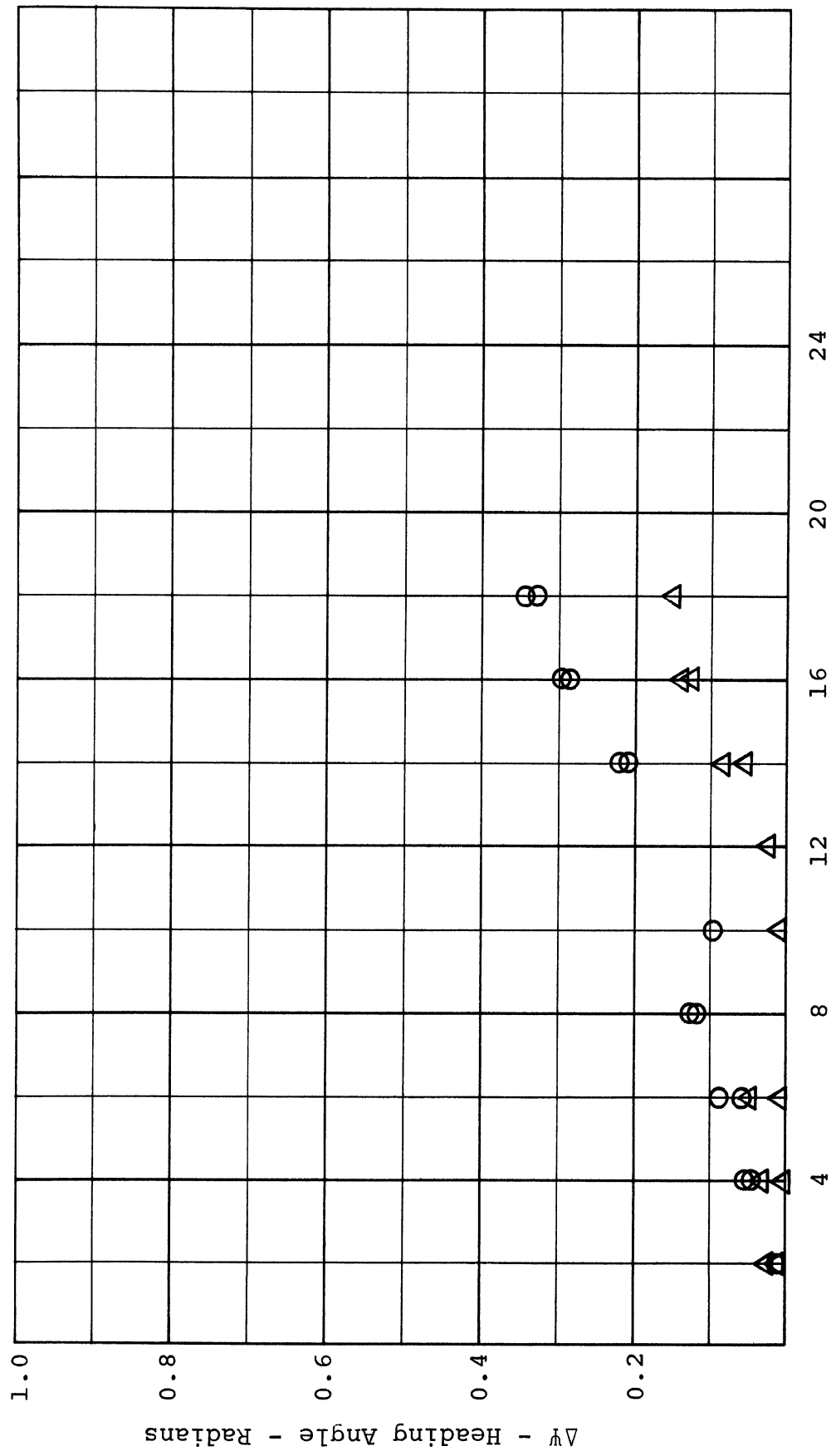
SINUSOIDAL STEER - 45 MPH - AUSTIN



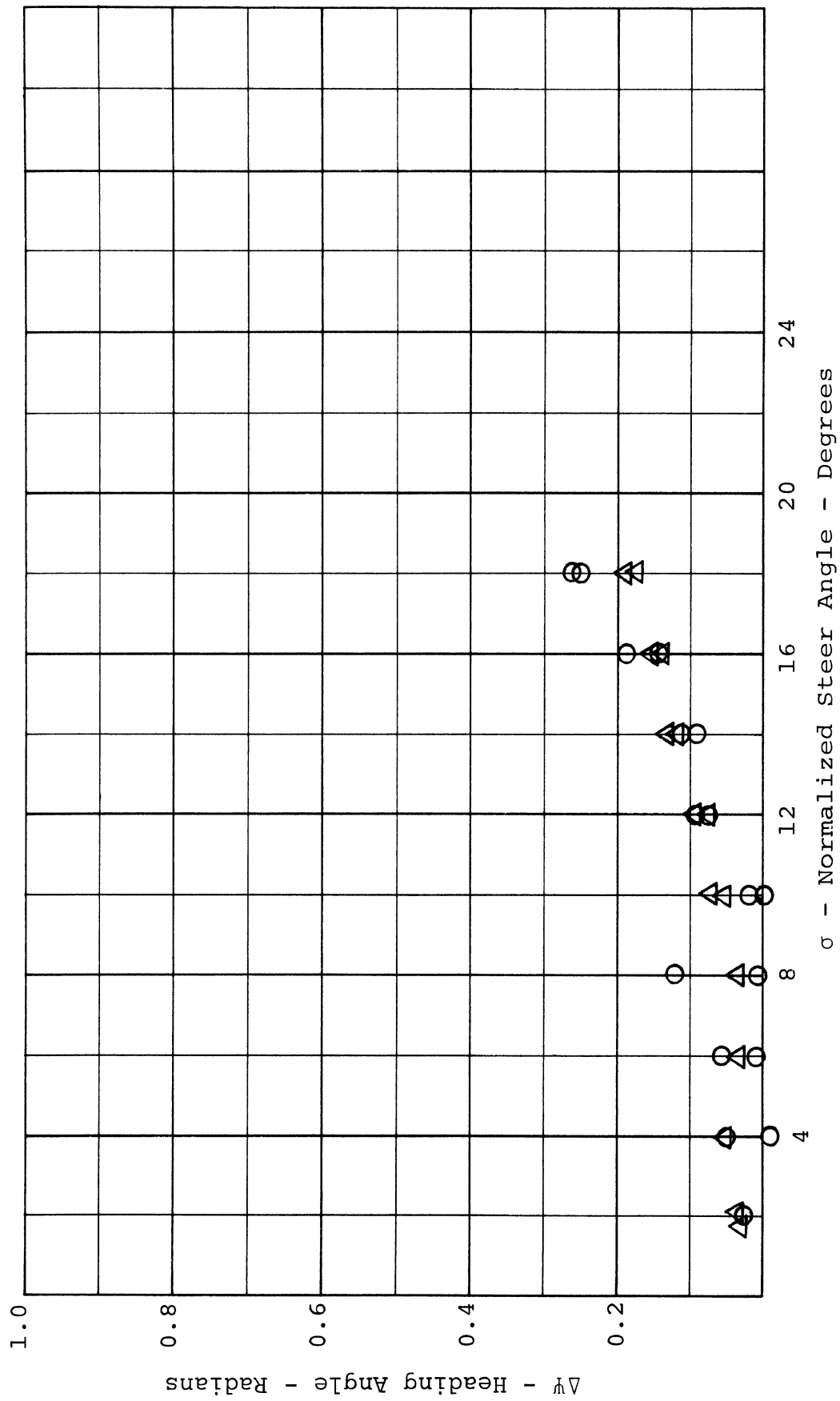
SINUSOIDAL STEER - 45 MPH - BROOKWOOD



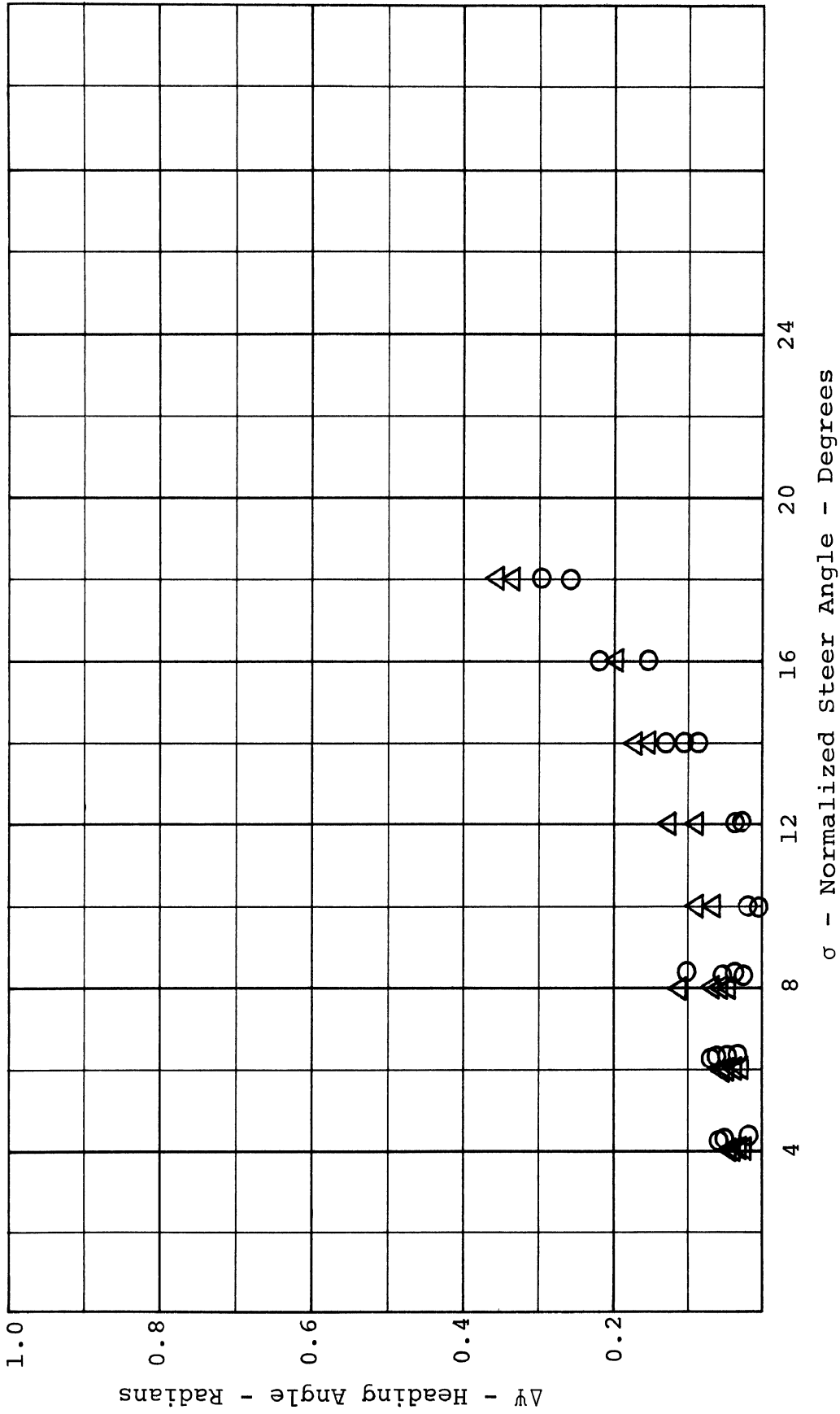
SINUSOIDAL STEER - 45 MPH - DODGE



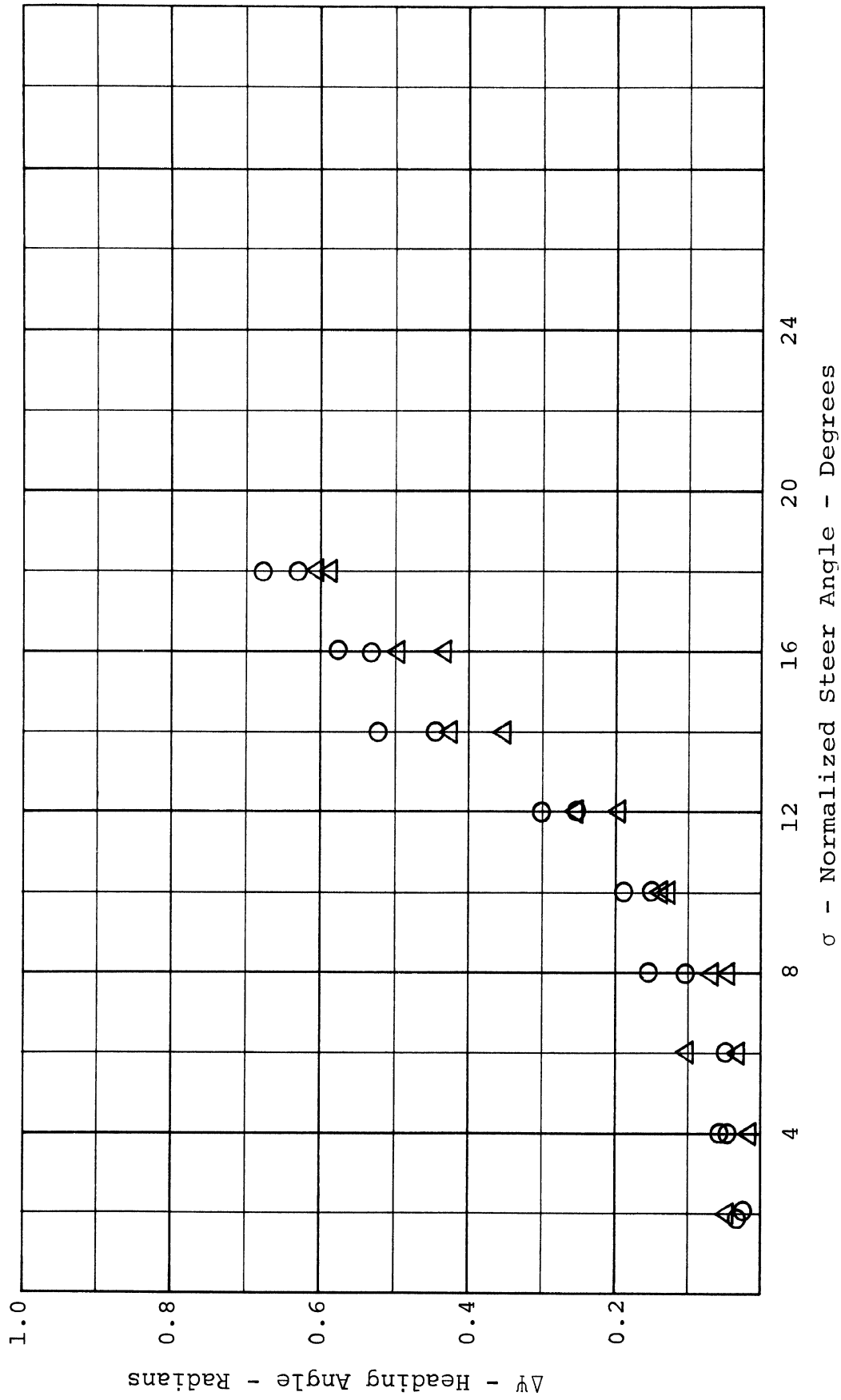
σ - Normalized Steer Angle - Degrees
 SINUSOIDAL STEER - 45 MPH - GALAXIE



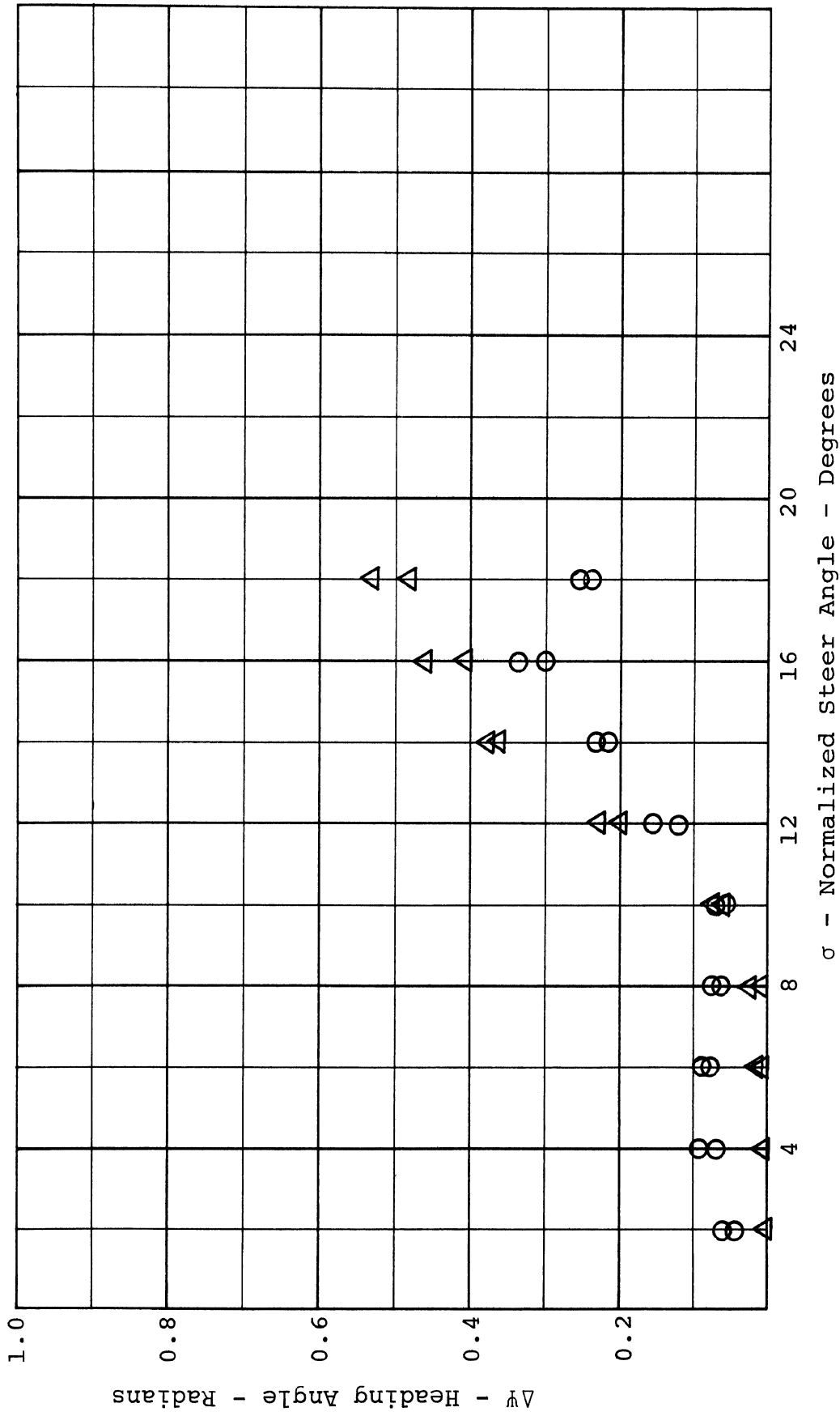
SINUSOIDAL STEER - 45 MPH - GREMLIN



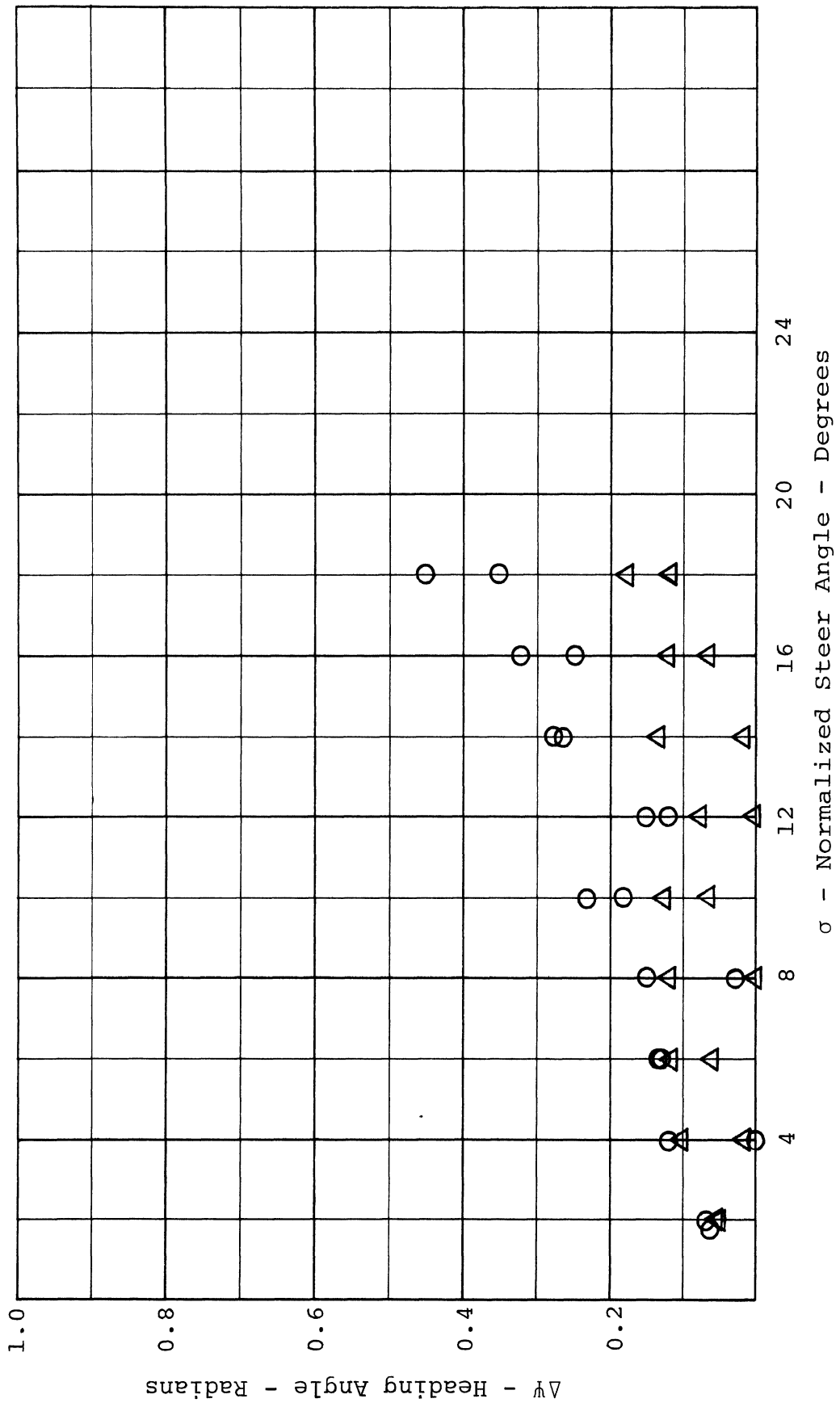
SINUSOIDAL STEER - 45 MPH - IMPERIAL



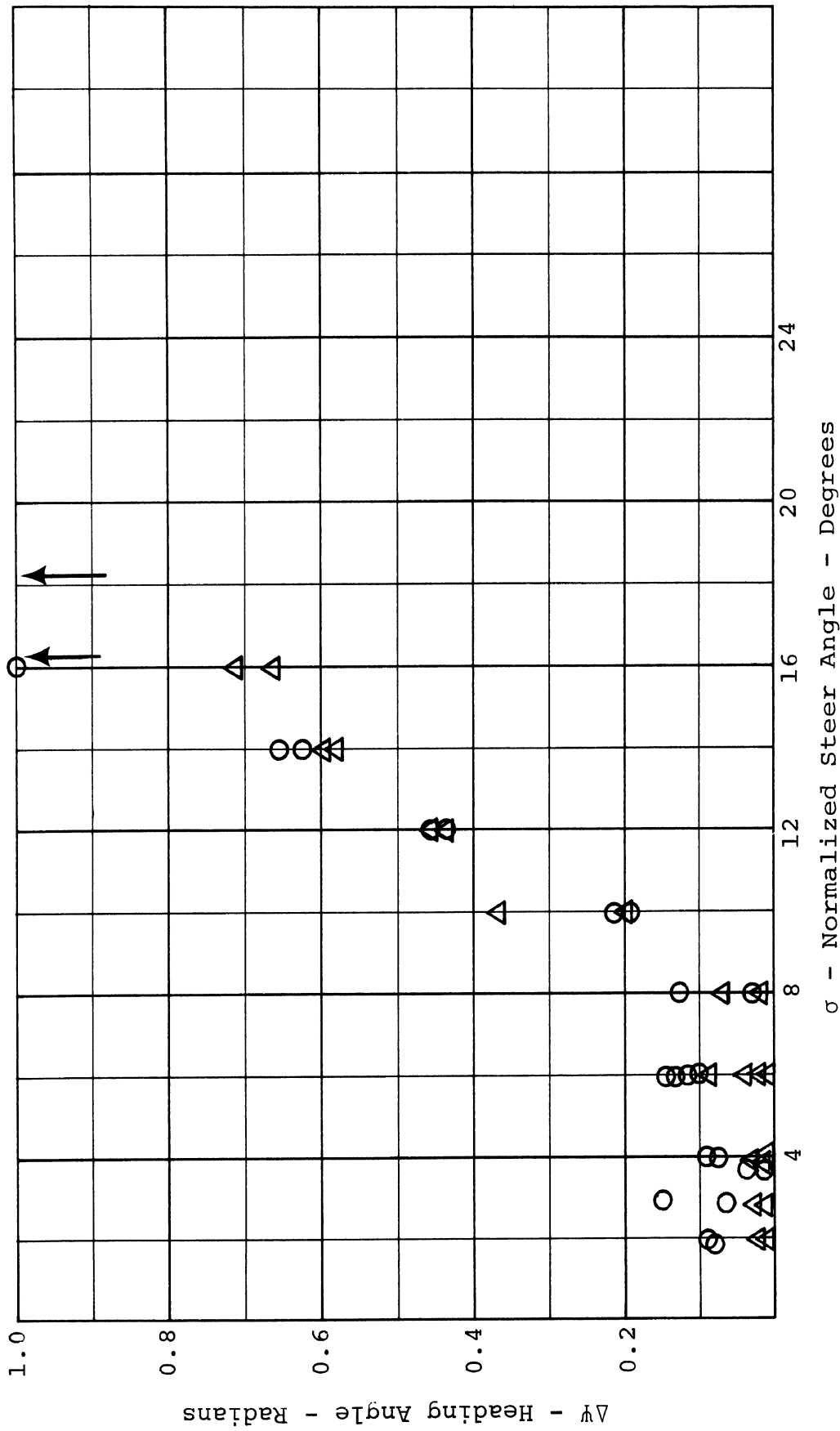
SINUSOIDAL STEER - 45 MPH - LOTUS



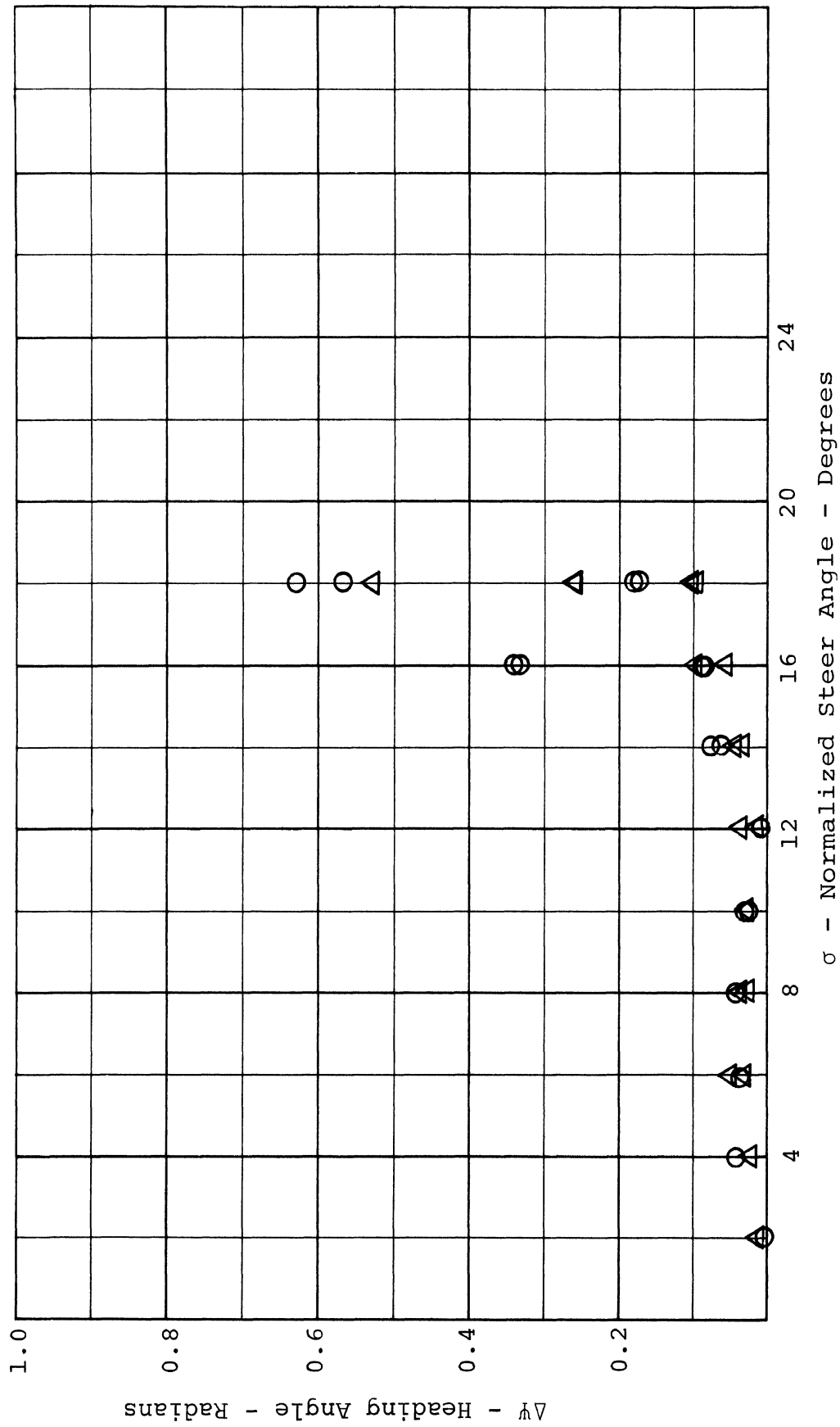
SINUSOIDAL STEER - 45 MPH - MERCEDES



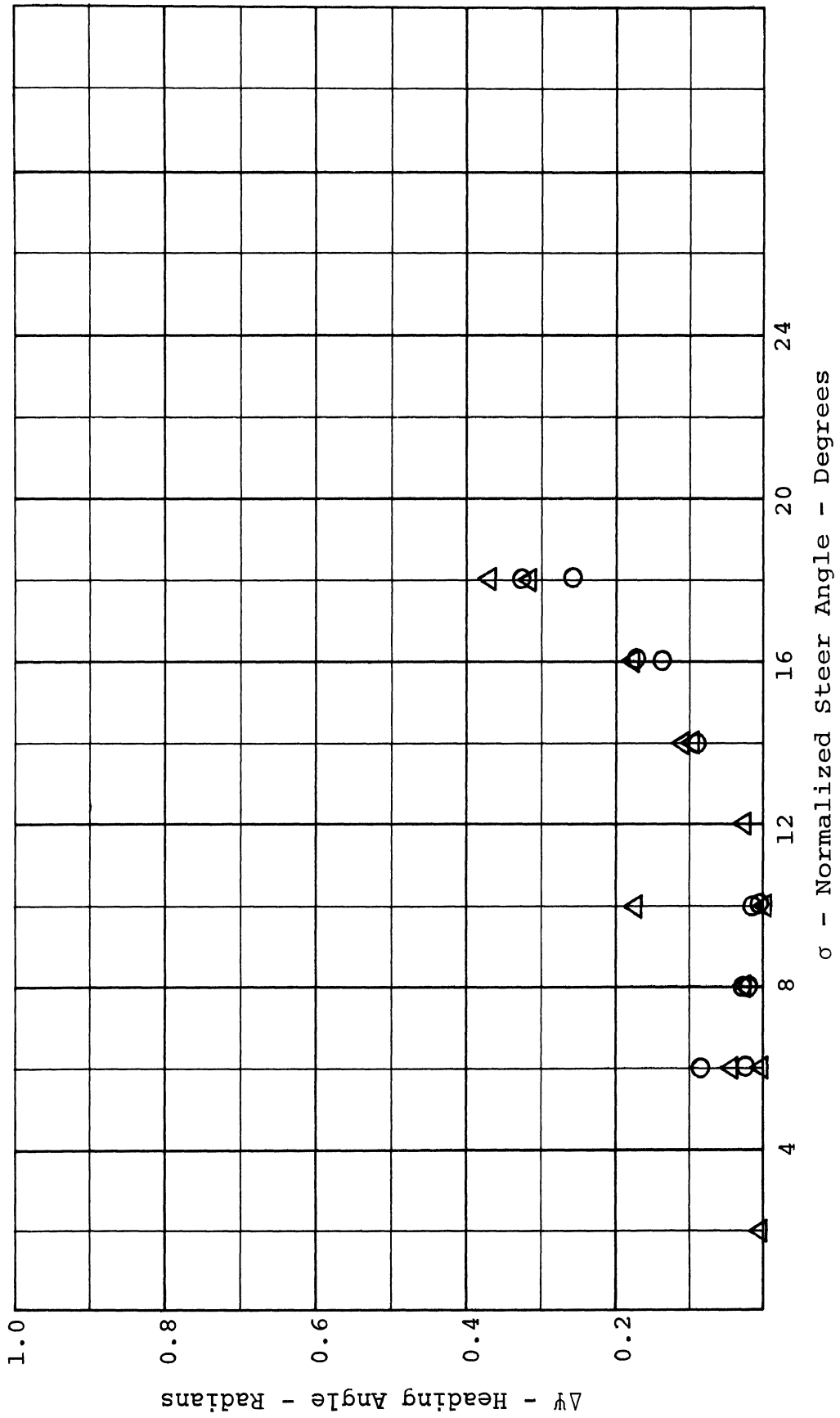
SINUSOIDAL STEER - 45 MPH - TORONADO



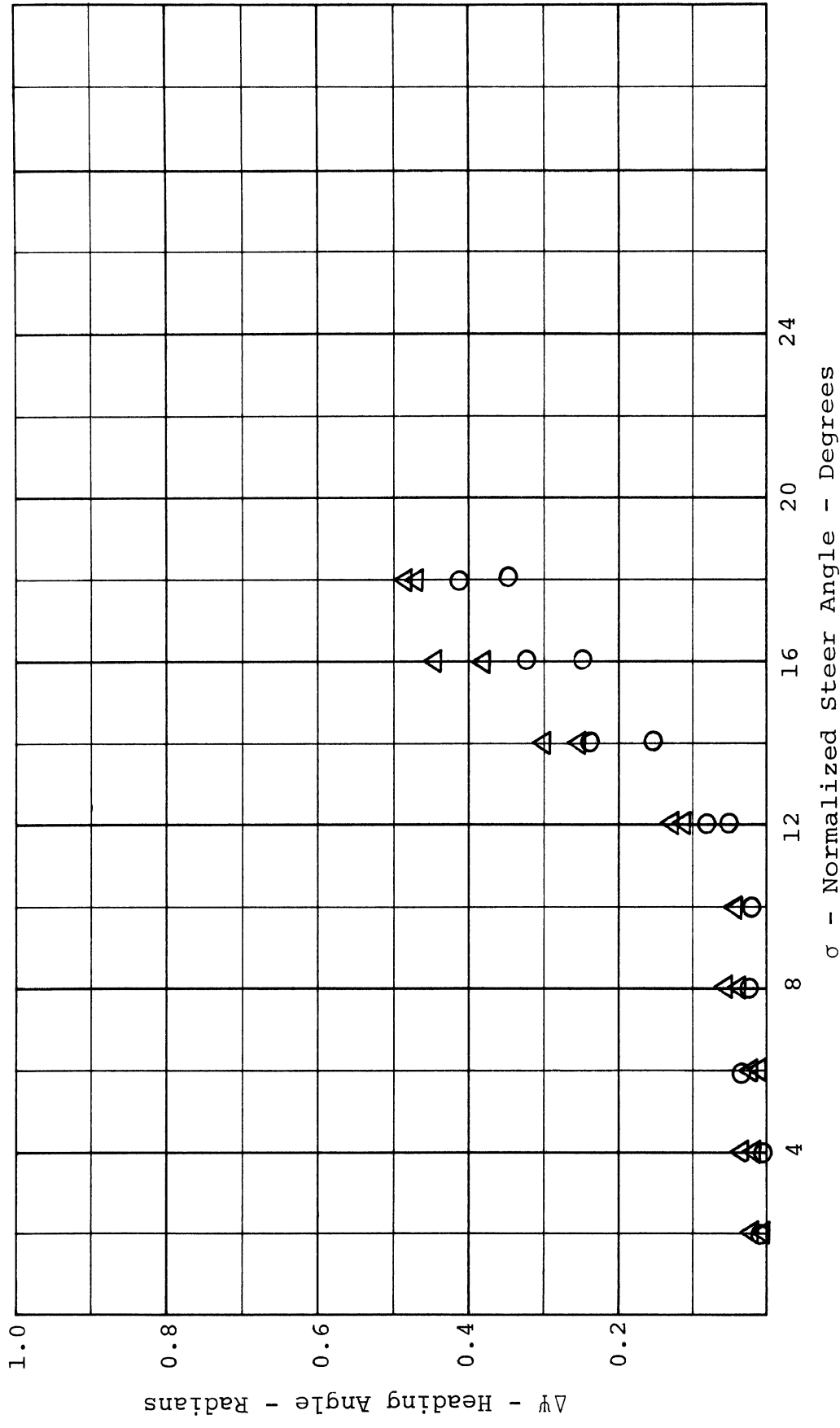
SINUSOIDAL STEER - 45 MPH - VW



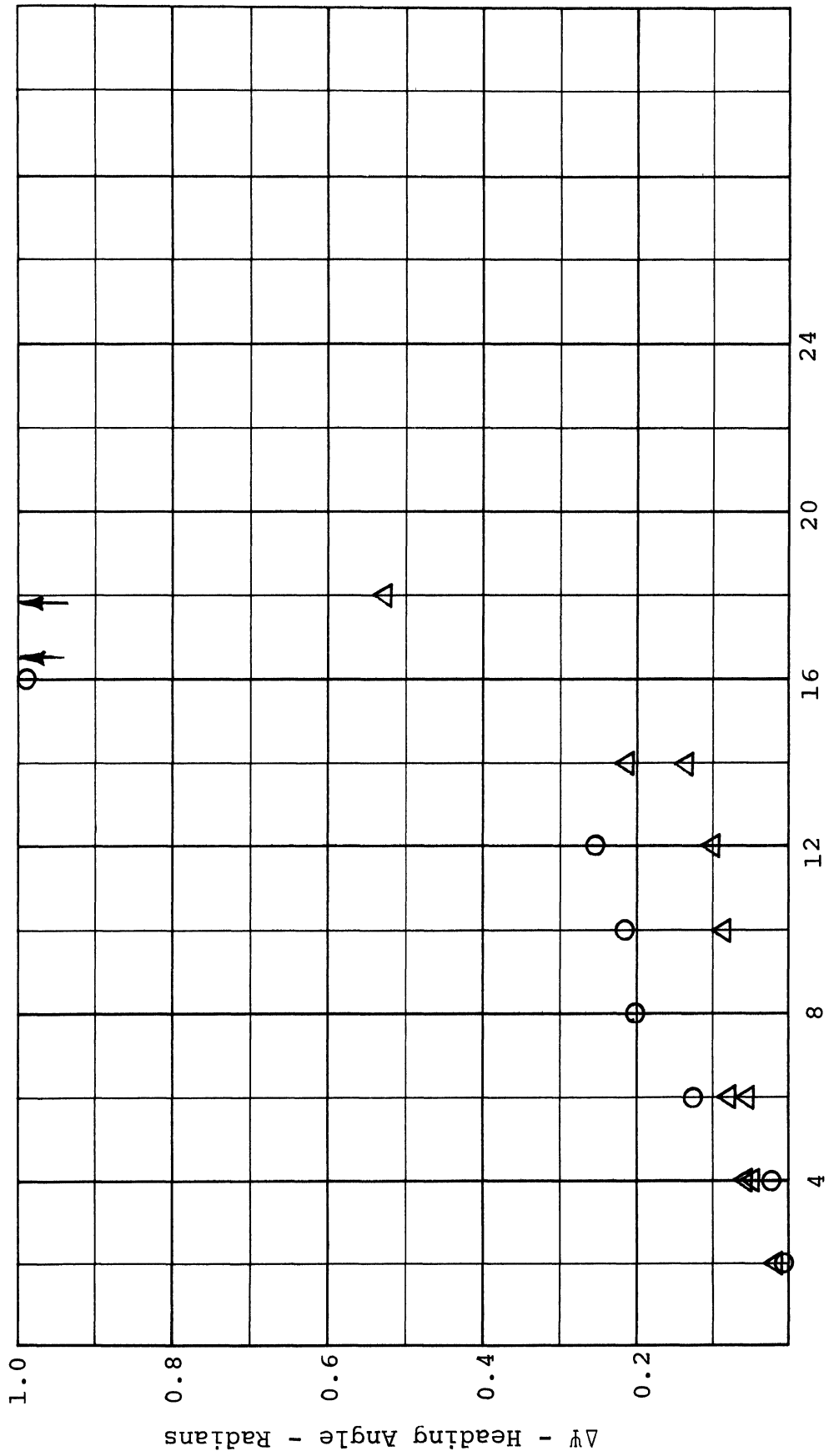
SINUSOIDAL STEER - 60 MPH - AMBASSADOR



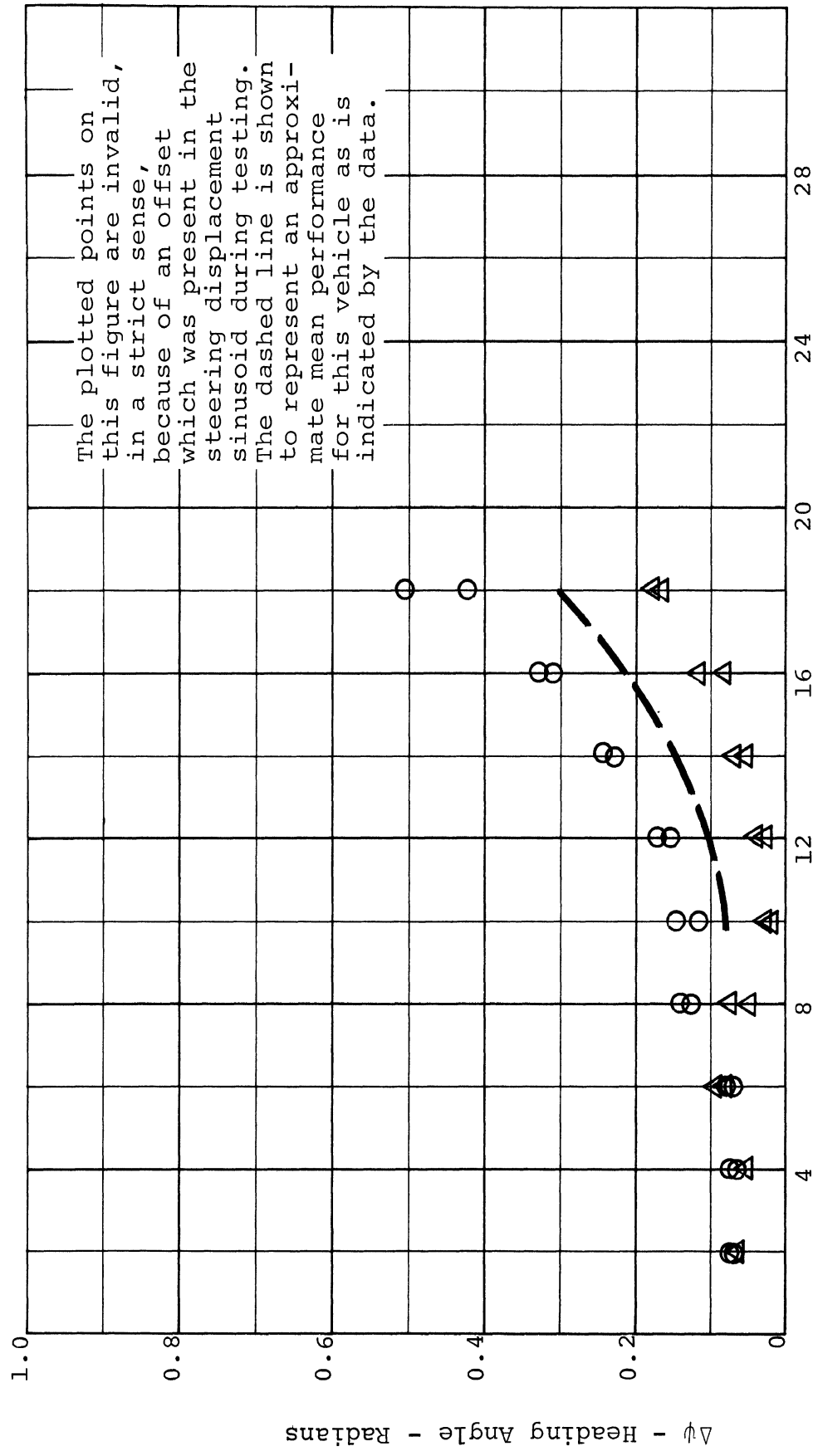
SINUSOIDAL STEER - 60 MPH - BROOKWOOD



SINUSOIDAL STEER - 60 MPH - DODGE

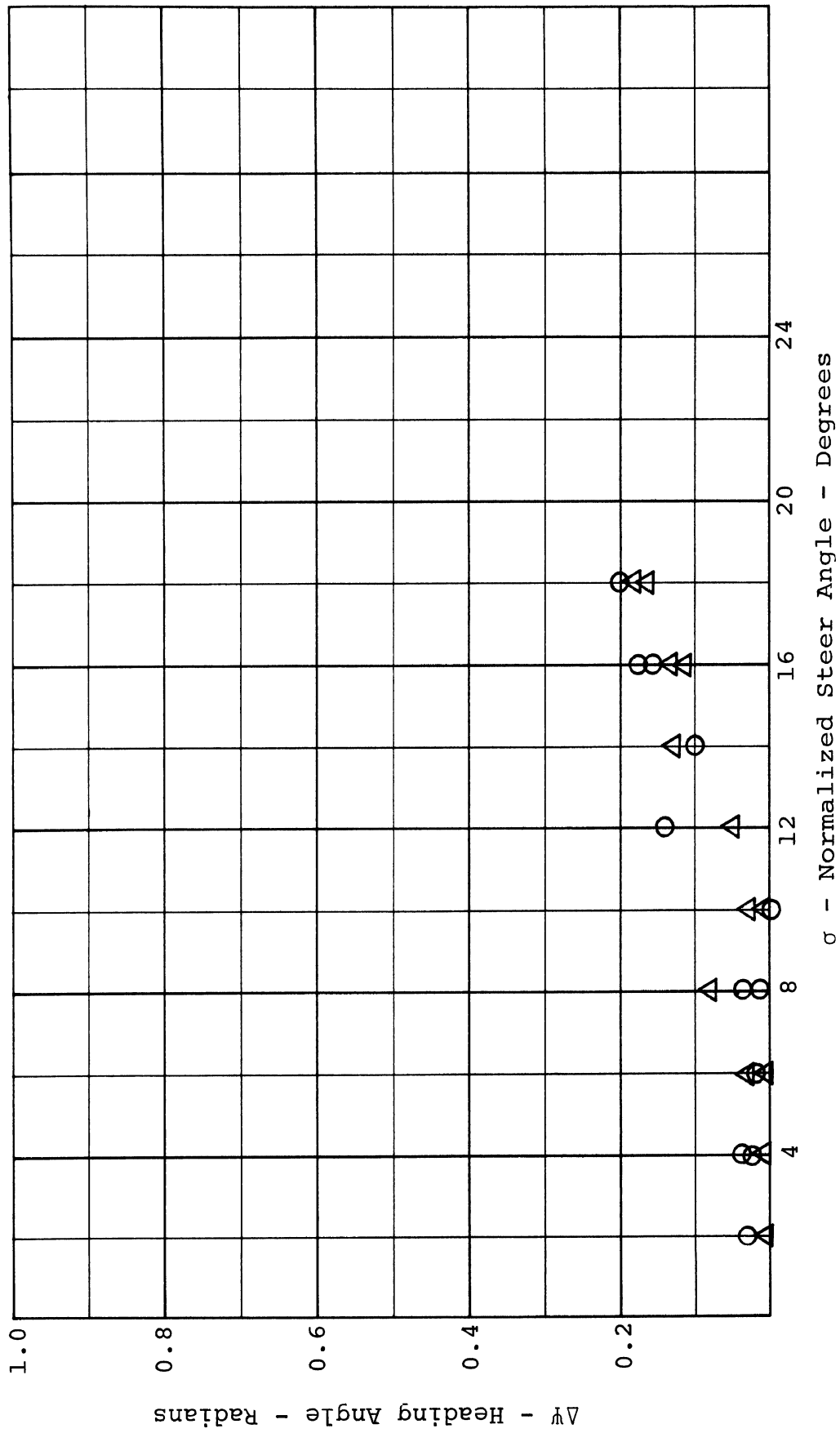


SINUSOIDAL STEER - 60 MPH - FIREBIRD

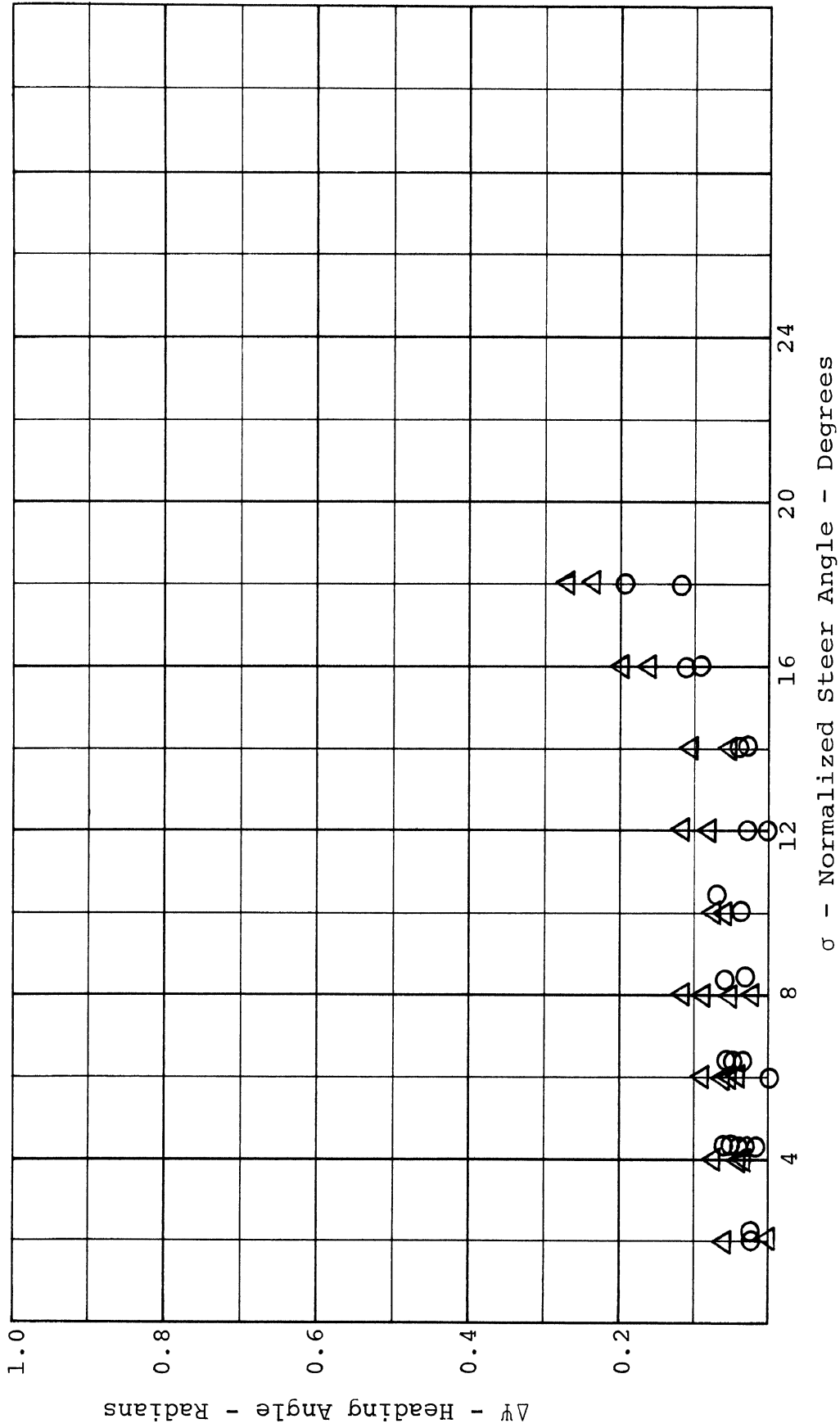


σ - Normalized Steer Angle - Degrees

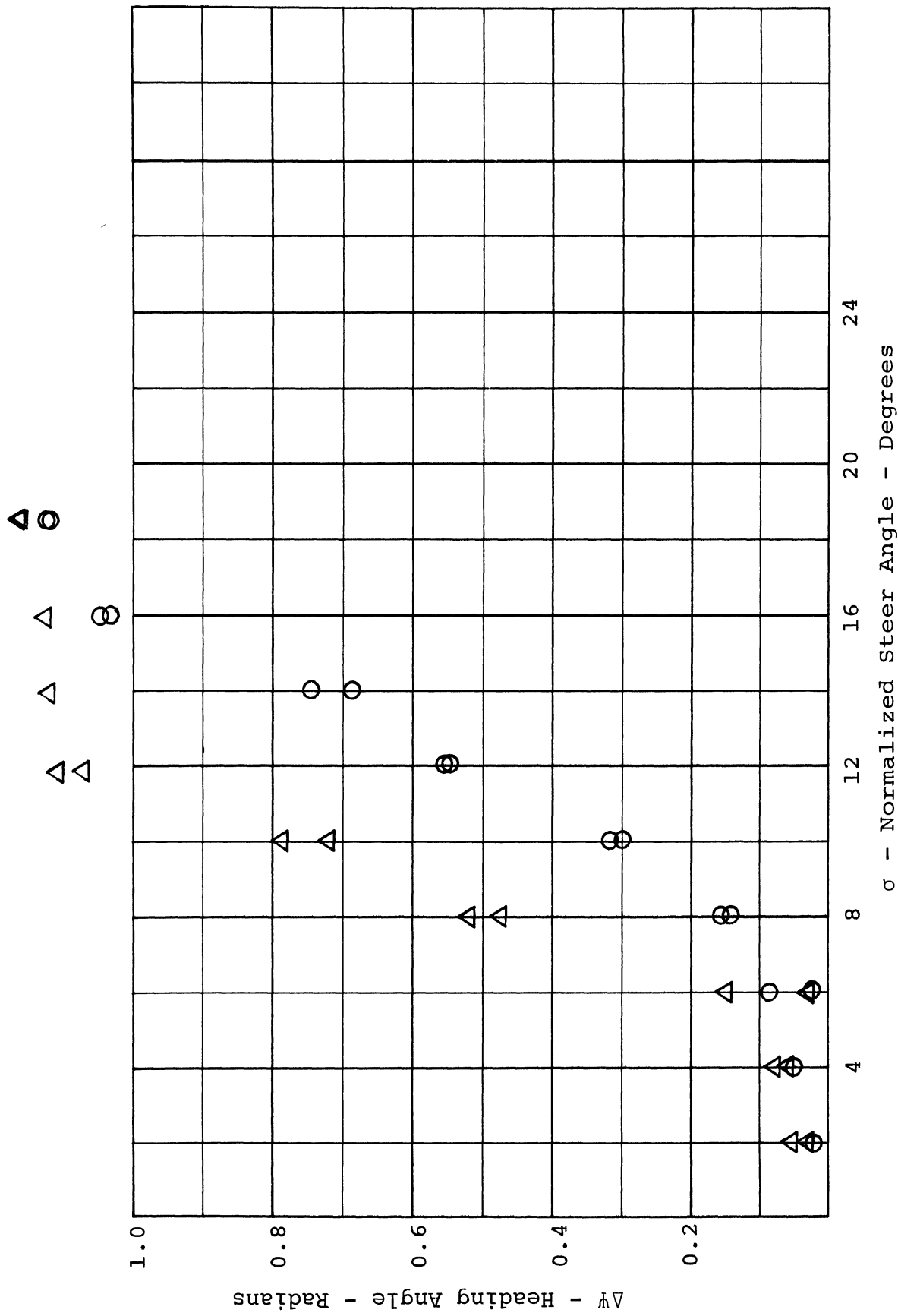
SINUSOIDAL STEER - 60 MPH - GALAXIE



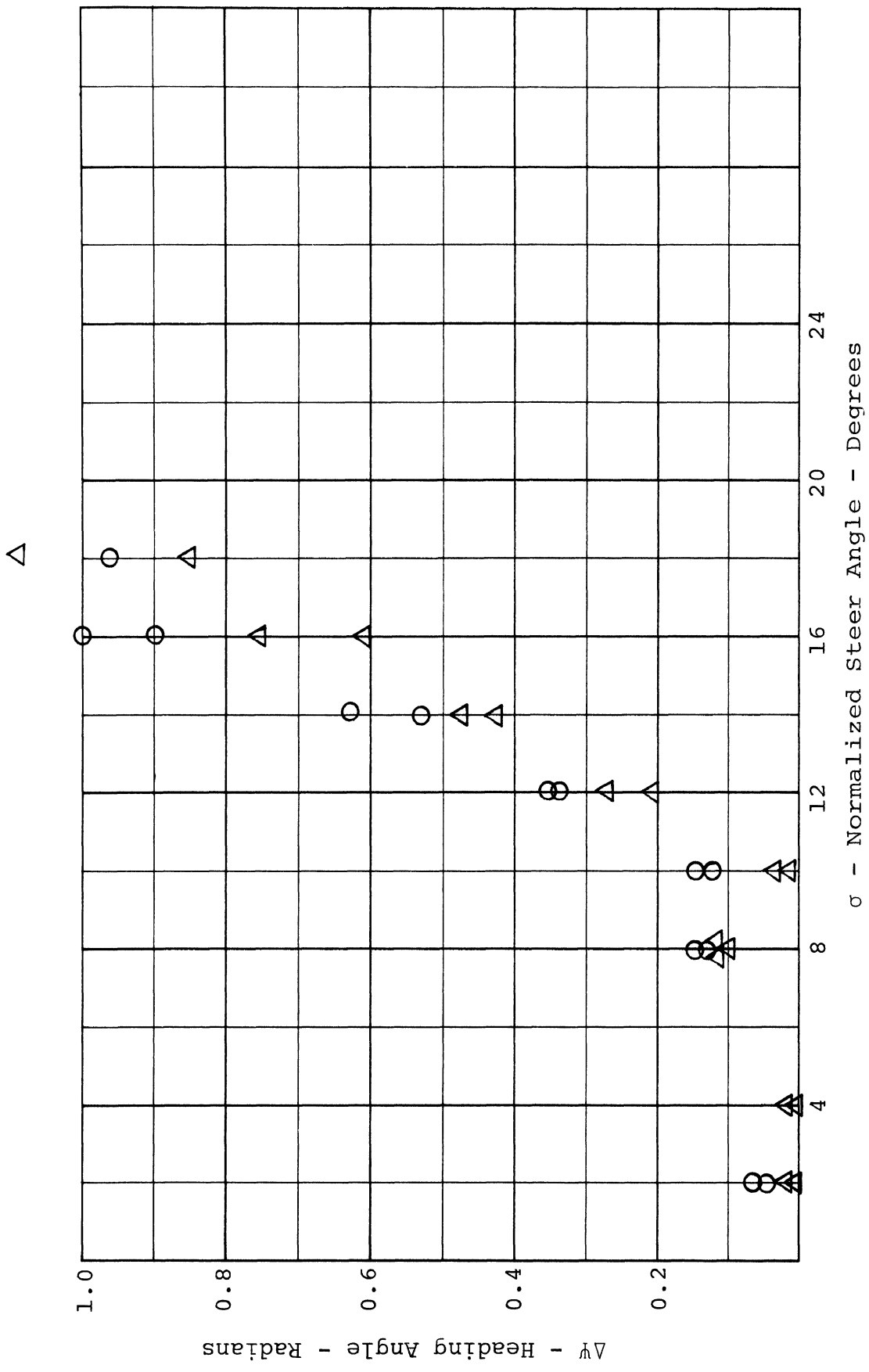
SINUSOIDAL STEER - 60 MPH - GREMLIN



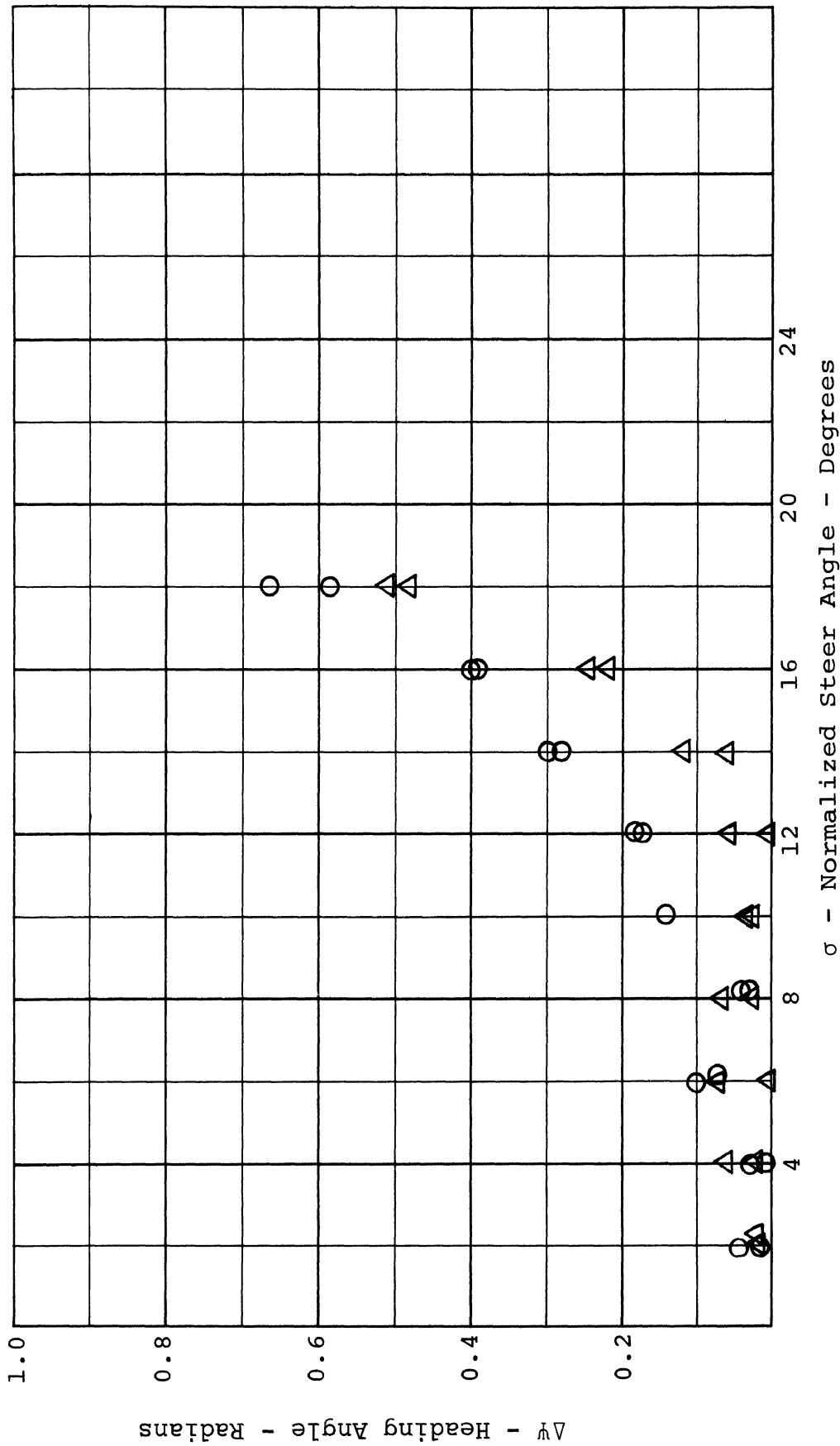
SINUSOIDAL STEER - 60 MPH - IMPERIAL



SINUSOIDAL STEER - 60 MPH - LOTUS



SINUSOIDAL STEER - 60 MPH - MERCEDES

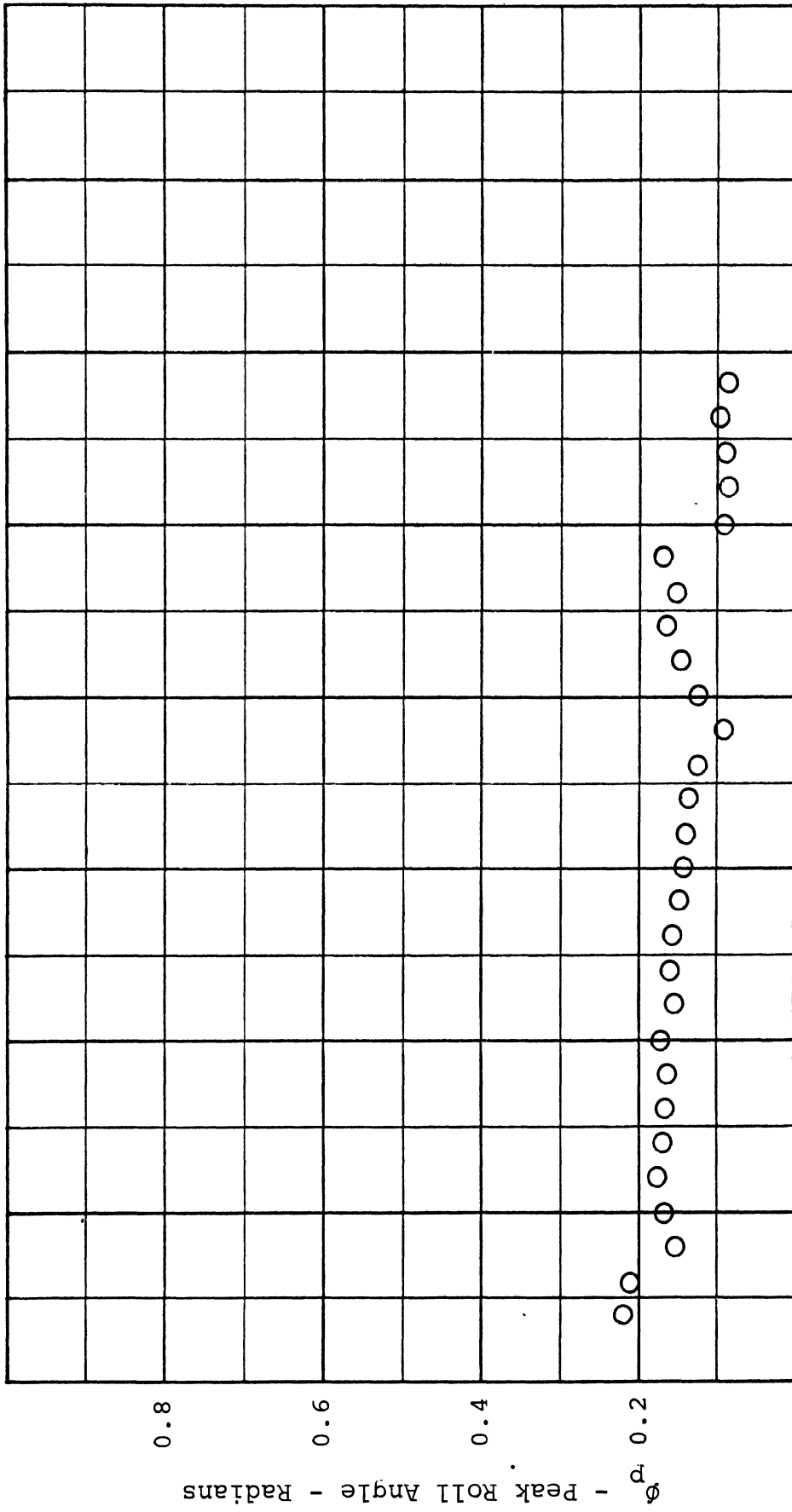


SINUSOIDAL STEER - 60 MPH - TORONADO

VHTP #6 - DRASTIC STEER AND BRAKE

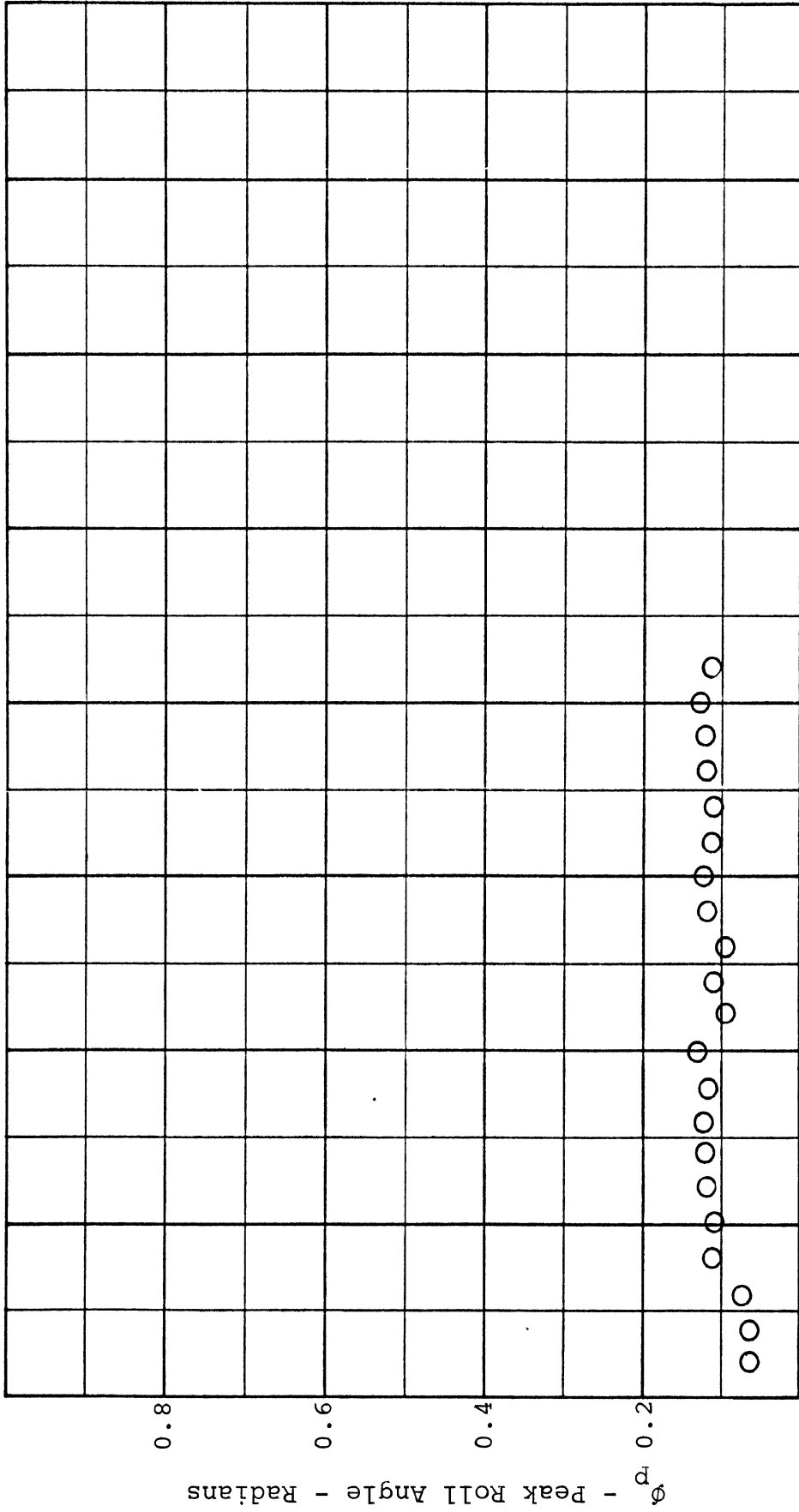
N - Test Runs

ϕ_p - Peak Value of Roll Angle



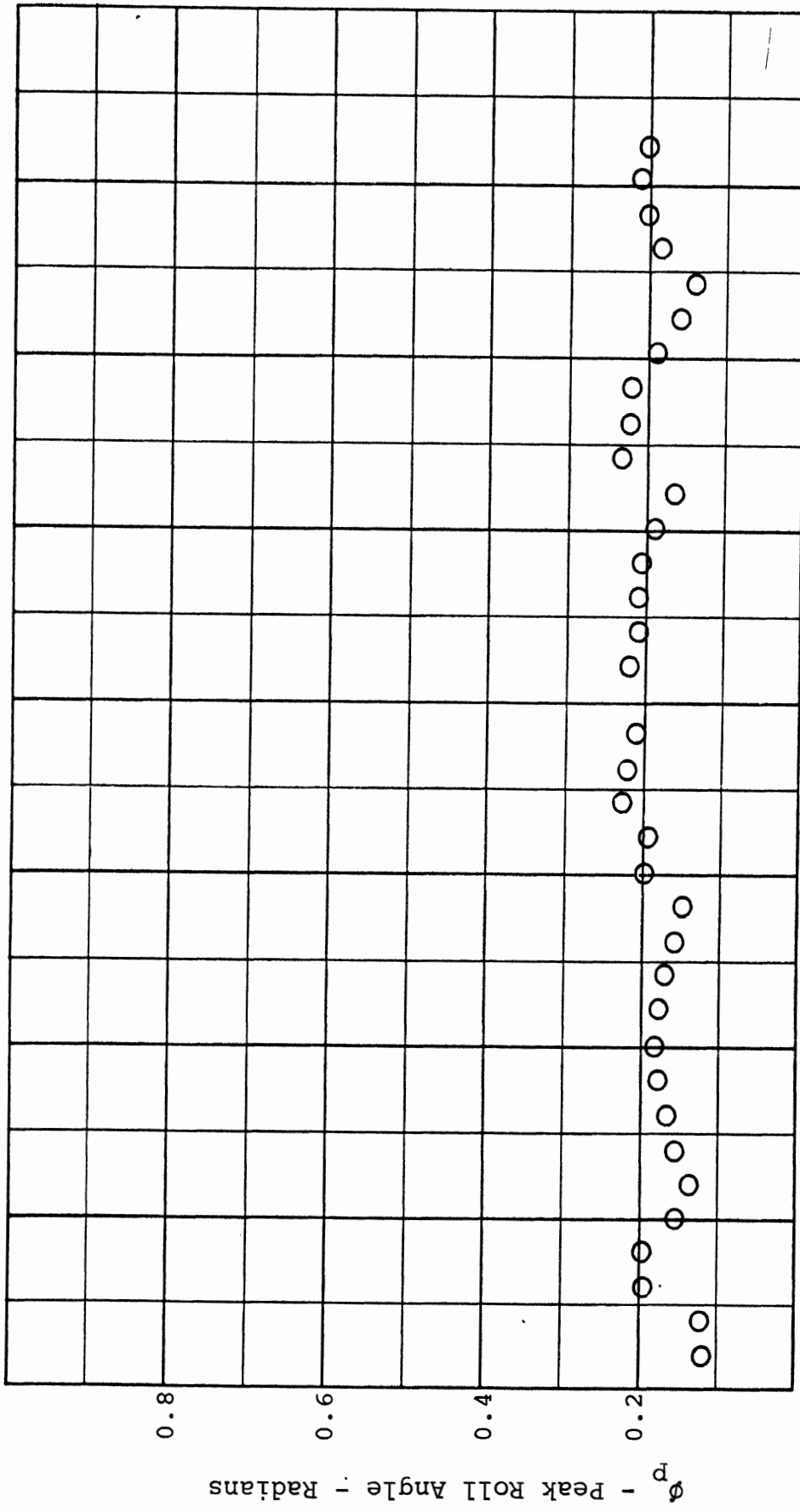
N - Test Runs

DRASTIC STEER/BRAKE - AMBASSADOR



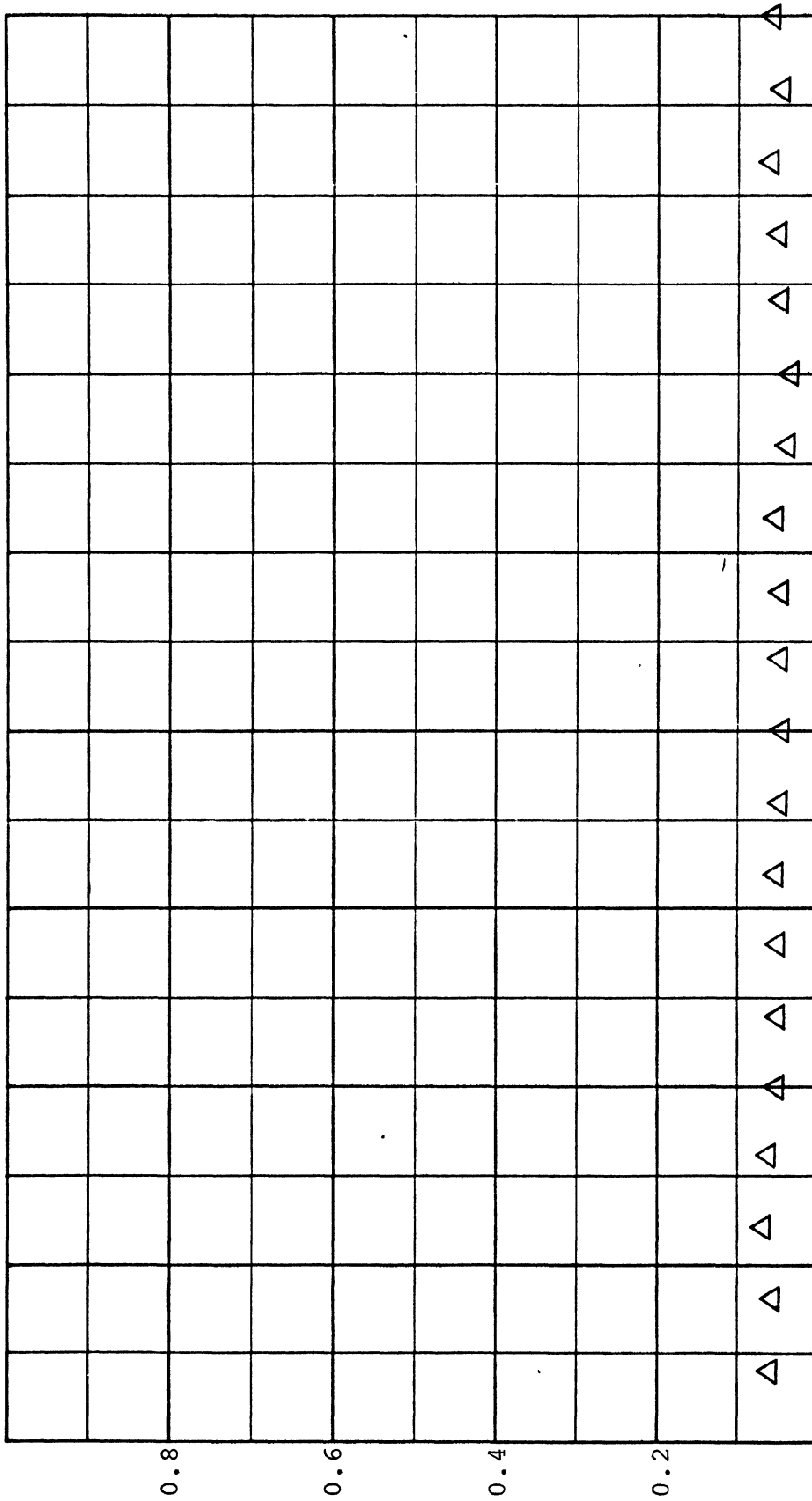
N - Test Runs

DRASTIC STEER/BRAKE - BROOKWOOD



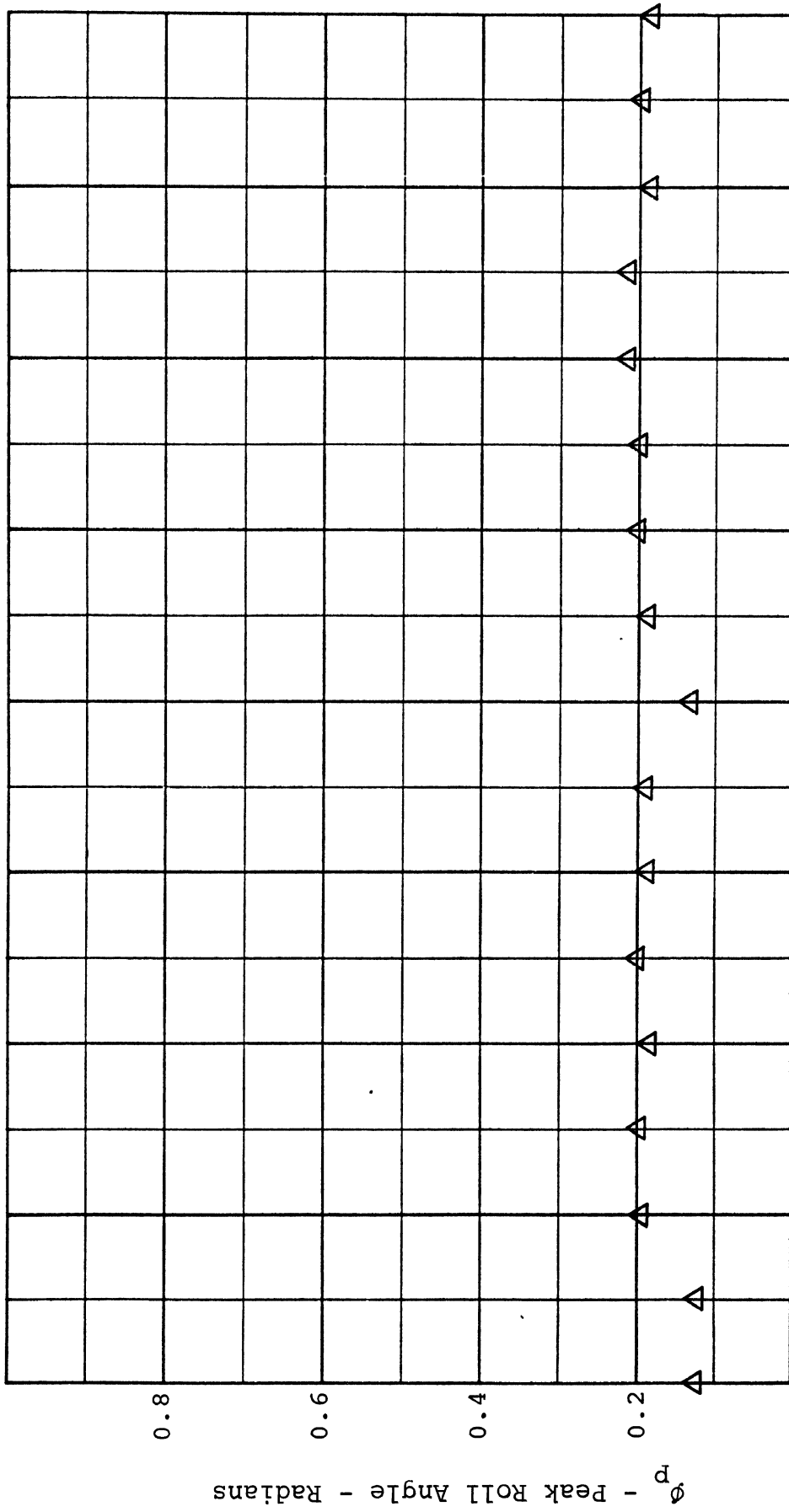
N - Test Runs

DRASTIC STEER/BRAKE - DODGE



N - Test Runs

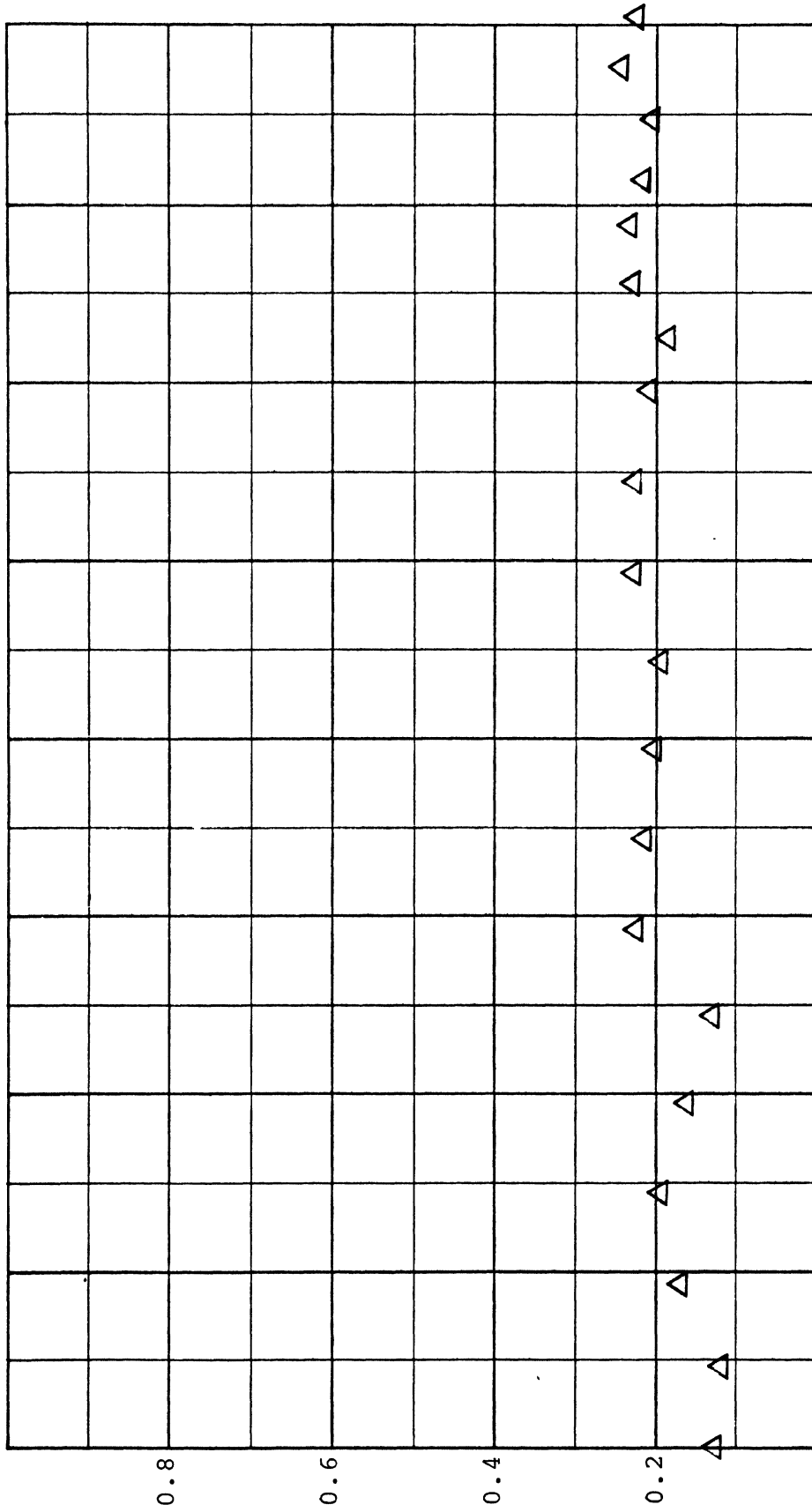
DRASTIC STEER/BRAKE - FIREBIRD



N - Test Runs

DRASTIC STEER/BRAKE - GALAXIE

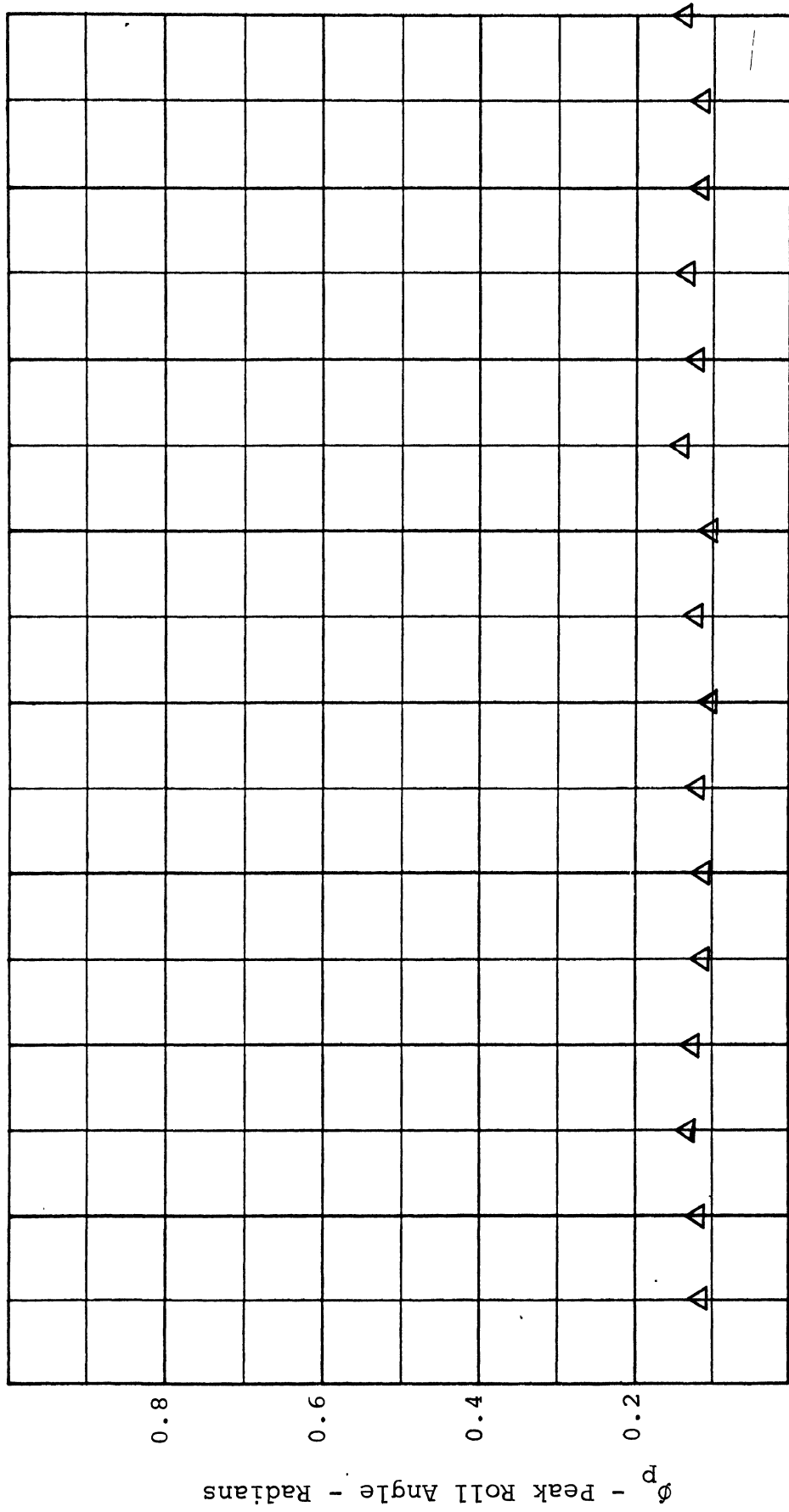
ϕ_p - Peak Roll Angle - Radians



N - Test Runs

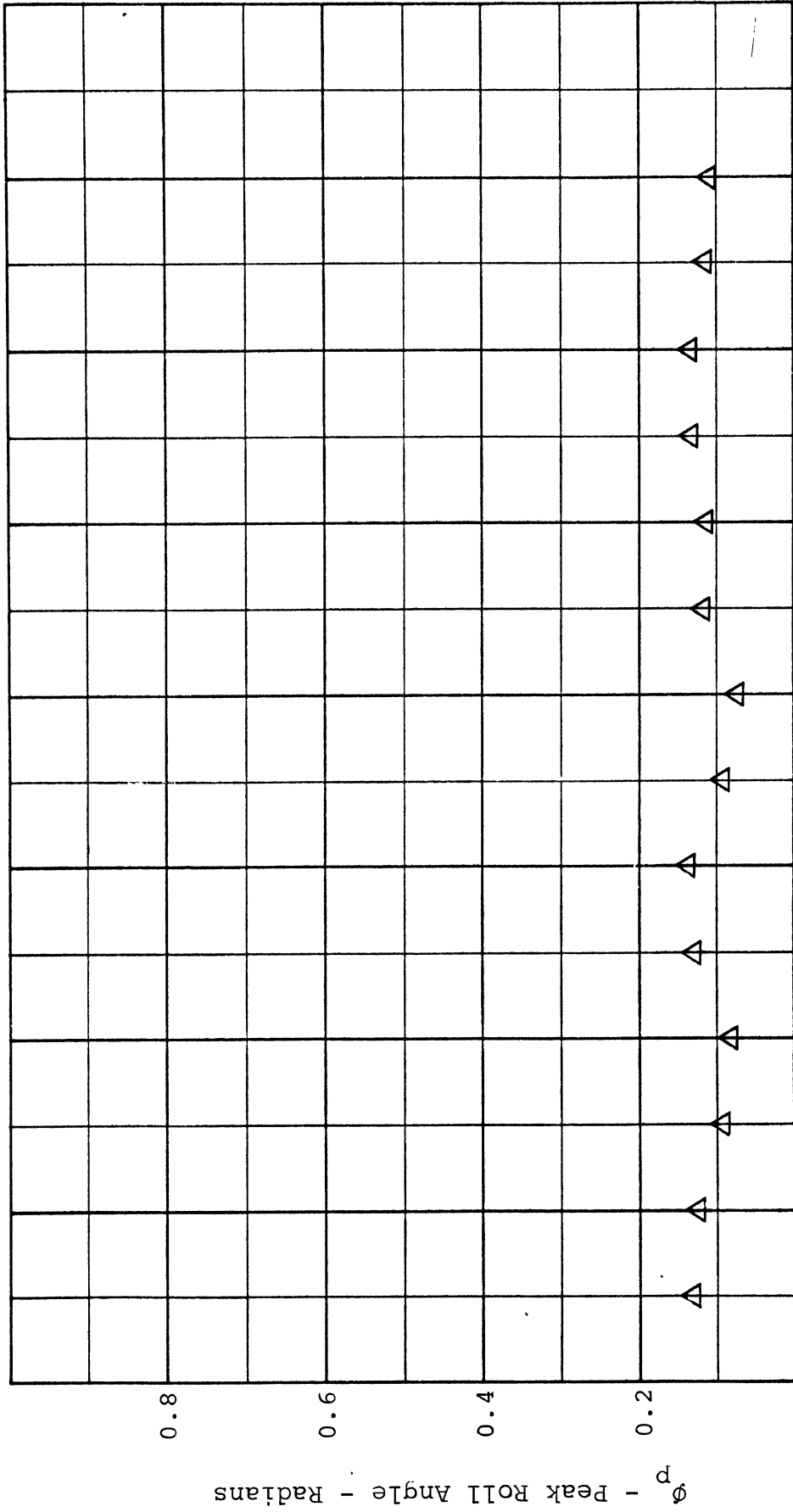
DRASTIC STEER/BRAKE - GREMLIN

ϕ_p - Peak Roll Angle - Radians



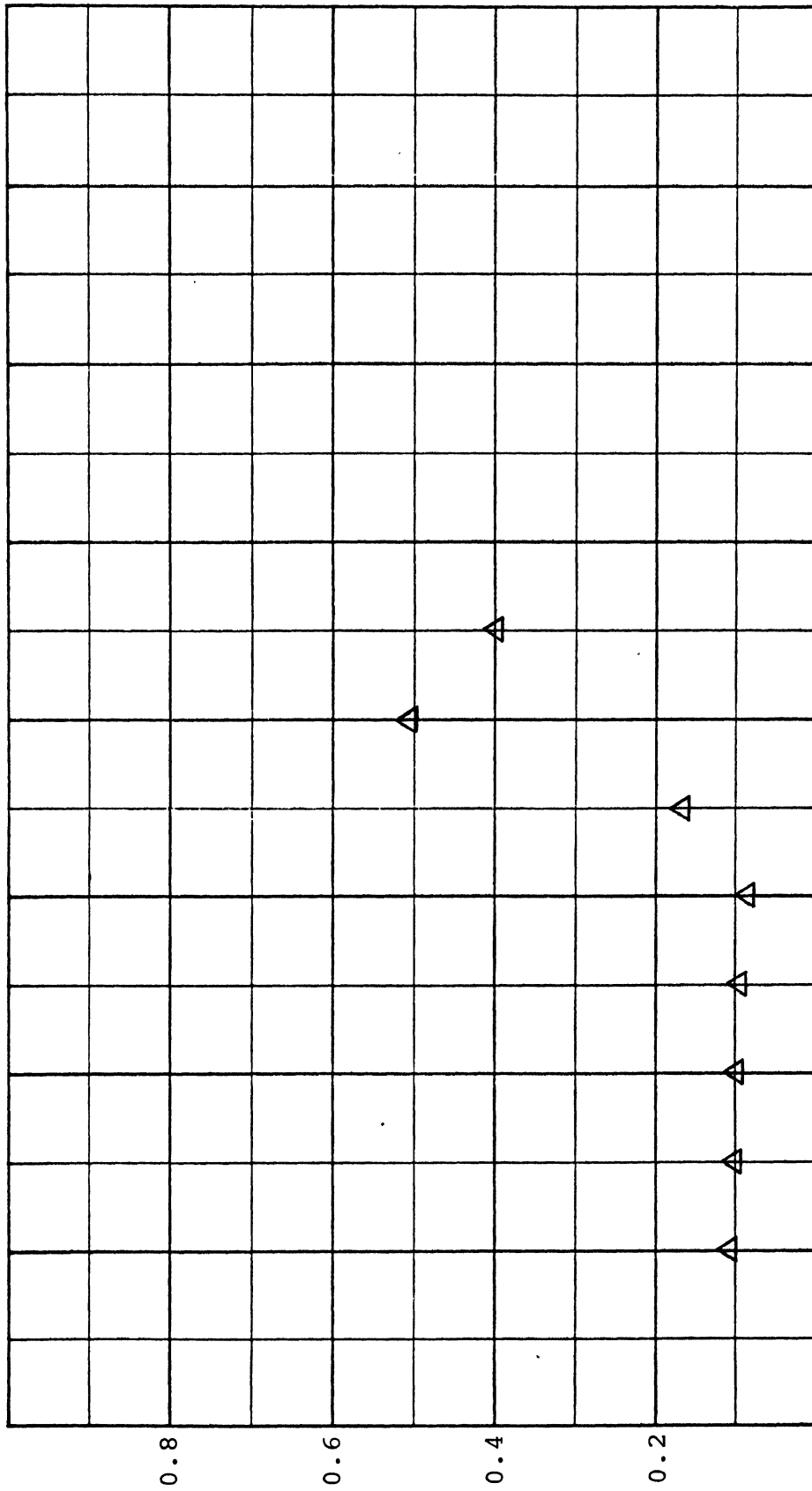
N - Test Runs

DRASTIC STEER/BRAKE - IMPERIAL



N - Test Runs

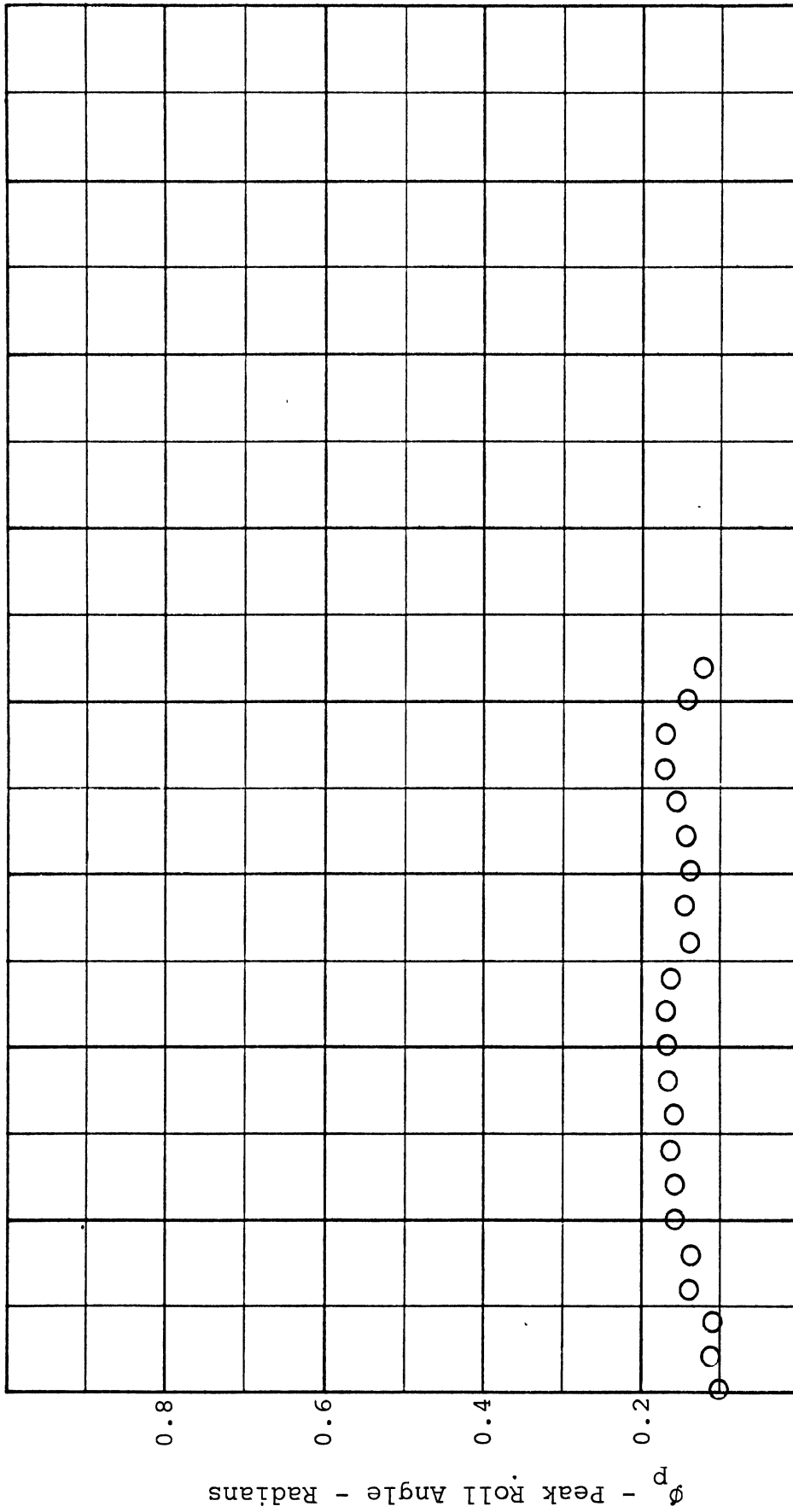
DRASTIC STEER/BRAKE - LOTUS



N - Test Runs

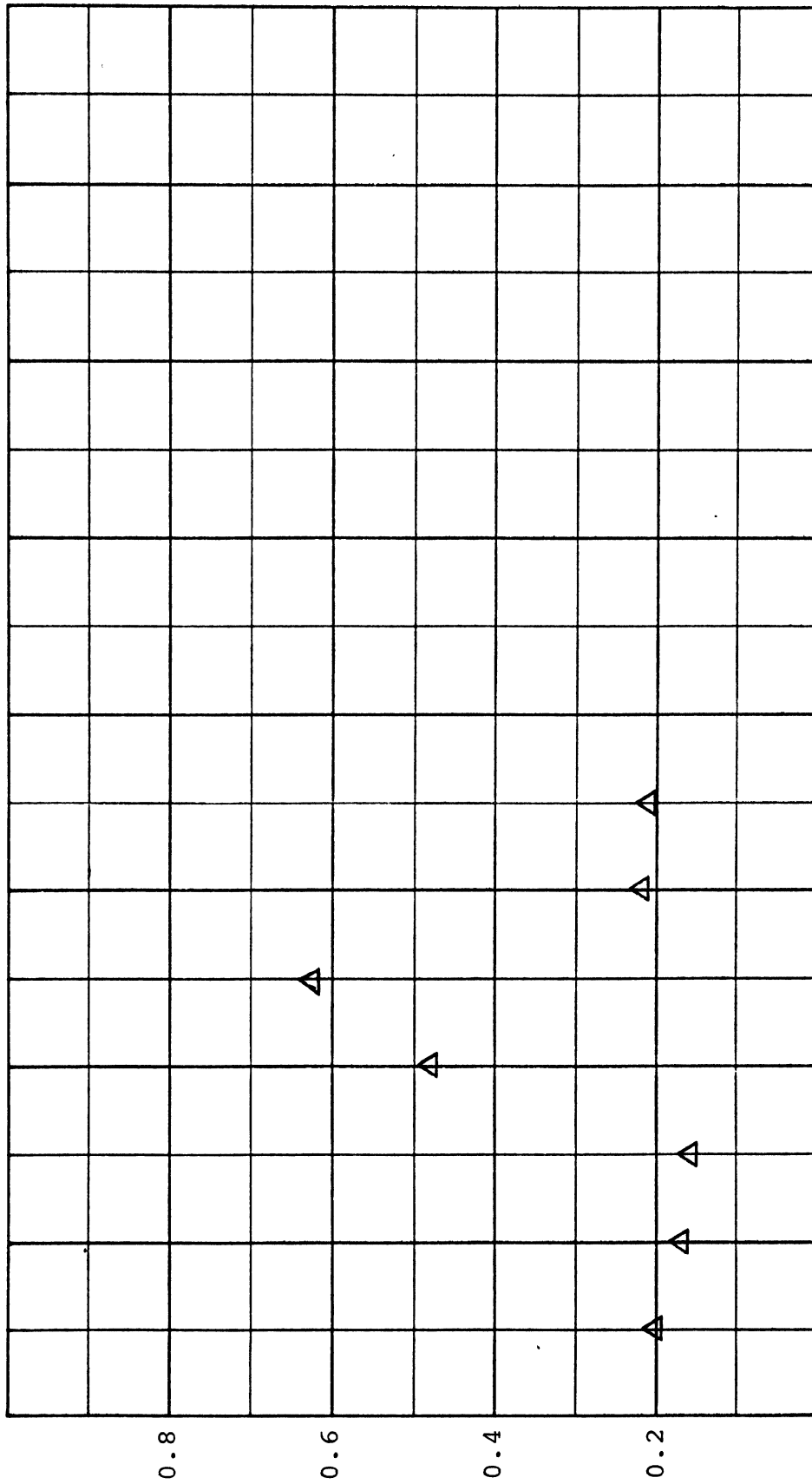
DRASTIC STEER/BRAKE - MERCEDES

ϕ_p - Peak Roll Angle - Radians



N - Test Runs

DRASTIC STEER/BRAKE - TORONADO



N - Test Runs

DRASTIC STEER/BRAKE - VW

ϕ_p - Peak Roll Angle - Radians