This [illegible] (1) to McDonnell Aircraft Corporation's letter No. 857-236-53815 Dated ___

DATE 30 April 1965

REVISED

FLUCTUATING PRESSURE DATA

32% MERCURY-ATLAS CONFIGURATION

REPORT B661 COPY NO. 25

SUBMITTED UNDER NAS1-3179

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1. SUMMARY

This report contains plots and tabulations of fluctuating pressure data reduced by McDonnell under Contract NAS1-3179. The purpose of this report is to collect available data together for future reference. No evaluations are made or conclusions drawn from these data.

2. TABLE OF CONTENTS

3. INTRODUCTION

The fluctuating pressure data presented in this report have been reduced from transonic wind tunnel tests of Mercury-Atlas configurations conducted at Tullahoma in October 1960. Details of the test operation, instrumentation, etc. are given in Reference 1.

The raw data recorded during the tests consist of individual time histories of pressure from a number transducers in the model. The reduced data consist of the following statistical information which was extracted from selected pairs of time histories:

(a) Normalized auto correlation of each signal

(b) Normalized cross correlation between the two signals

(c) Power spectral density of each signal

(d) Normalized co- and quad-spectral densities between the two signals

(e) Modulus and Phase of coherency between the two signals

The specific definitions of the above quantities will be found in the next sections. Only selected combinations of pressure signals have been reduced based on the needs of the subject contract effort. For each combination selected, tabulations of all of the above are presented herein, but plots of only items (b), (c), and (d) are included.

All spectral data are presented versus three frequency scales - model frequency, prototype frequency and reduced frequency. The reduced frequency is given by $\omega \ell / U_\infty$ where ω is the circular frequency, ℓ is a characteristic dimension and U_∞ is the free stream velocity.

The power spectra are plotted and tabulated with the ordinate multiplied by a scale factor for each frequency scale. Consequently, to obtain the true power spectrum appropriate to a given frequency scale, the ordinate must be divided by the appropriate scale factor. The scale factors appear in the tabulation sheets.

An index of plots and tabulations is presented separately for each of the Mercury-Atlas configurations tested. The order of appearance in the index is first by Mach Number, then by transducer pairs. For example, transducer pair I X J is cataloged first by I and then by J. However, the first appearing index is not necessarily the smaller of the two indices. The order of the indices depends upon which of the two signals leads the other in accordance with the definition of the cross-correlation function set forth in the next section.

4. DEFINITIONS AND DISCUSSION OF THE DATA REDUCTION TECHNIQUE

The fluctuating pressure data included in this report were reduced from raw data recorded on magnetic tape at the time the test was conducted. The data reduction was done by the McDonnell Automation Center using digital sampling methods based on the method of Blackman and Tukey, Reference 2.

Briefly, two pressure signals $p_i(t)$ and $p_j(t)$ are sampled simultaneously at intervals of Δt giving a series of discrete values from each signal

$$p_i(1),\ p_i(2),\ p_i(3),\ \ldots\ p_i(N)$$

and

$$p_j(1),\ p_j(2),\ p_j(3),\ \ldots\ p_j(N)$$

where

$$p(k) = p(t) \quad \text{with} \quad t = k\,\Delta t$$

The cross-correlation function, which is defined as

$$R_{ij}(\tau) = \overline{p_i(t)\ p_j(t-\tau)} = \lim_{T\to\infty} \frac{1}{2T} \int_{-T}^{T} p_i(t)\ p_j(t-\tau)\ dt$$

is approximated by

$$R_{ij}(L) = \frac{1}{N-L} \sum_{k=L+1}^{N} p_i(k) \cdot p_j(k-L)$$

where $\tau = L\,\Delta t$. This is done for values of L from zero to m, the number of spectral estimates.

The cross-spectrum is then determined from the cross correlation function, which is now defined at discrete points, by numerically evaluating the Fourier Transform of the cross-correlation function; i.e.,

$$S_{ij}(\omega) = \int_{-\infty}^{\infty} e^{-i\omega\tau} R_{ij}(\tau)\, d\tau$$

The co-spectrum is the cosine transform of the above and the quad-spectrum is the sine transform, i.e.,

$$S_{ij}(\omega) = C_{ij}(\omega) - i\, Q_{ij}(\omega)$$

where

$$C_{ij}(\omega) = \int_{-\infty}^{\infty} \cos \omega\tau\, R_{ij}(\tau)\, d\tau$$

$$Q_{ij}(\omega) = \int_{-\infty}^{\infty} \sin \omega\tau\, R_{ij}(\tau)\, d\tau$$

The signal identified as the J signal in the data has always been lagged relative to the I signal in accordance with the above definitions.

The above outline of the data reduction method outlines only the basic ideas involved and does not include any discussion of statistical smoothing operations which are involved in the computation for better spectrum estimation. The PSD, which is defined mathematically for $-\infty \leq \omega \leq +\infty$ is a symmetrical function. The PSD as presented in the plots and tables herein is defined only for positive ω. Consequently, the ordinates have been multiplied by a factor of two so that the area under these curves from zero to $+\infty$ gives the mean square power of the signal.

To eliminate the possibility aliasing, all raw data were filtered before digitizing.

All reduced data have been corrected for time shift error between tape recorder channels. The correction times were determined from sinusoidal calibration signals recorded simultaneously on each data channel just prior to recording test data.

Definitions of the symbols appearing in the data together with their engineering (or mathematical) counterpart are listed in Table I at the end of this section. Pertinent digitizing parameters are given with each set of data. Included with these parameters is the number of statistical degrees of freedom, which is given in terms of the number of data samples and the number of spectral estimates as follows:

Degrees of Freedom = 2 (No. of Samples) / (No. of Spectral Est.)

Model scaling considerations, along with the sampling rate and the number of spectral estimates, determine the filter bandwidth in prototype frequency. This information is included with each set of data and is calculated from

$$B_p = (D_M/D_p)(U_p/U_M)(SR/m)$$

where

B_P - - - - - - - - Filter Bandwidth in prototype frequency

D_P, D_M - - - - - Prototype and model characteristic dimension

U_P, U_M - - - - - Prototype and model freestream velocity

SR - - - - - - - - Sampling rate

m - - - - - - - - Number of spectral estimates

The reader is advised that other data of a similar nature to that presented herein is given in Reference 3.

TABLE I DEFINITION OF SYMBOLS

ENGINEER SYMBOL	TABULATION SYMBOL	MEANING
τ	TAU	Lag Time for Auto-correlation
$R_{ii}(\tau)$		Auto-correlation
$R_{ii}(o)$	RII(o)	Auto-correlation for zero lag time
$R_{ii}(\tau)/R_{ii}(o)$	NRII(TAU)	Normalized auto-correlation
τ_s		Time shift error between records due to recorder head spacing
τ_c	TAU,C	True τ after correction for τ_s
$R_{ij}(\tau_c)$		Cross-correlation
$R_{ij}(\pm \tau_c)/\sqrt{R_{ii}(o)R_{jj}(o)}$	NRIJ($\pm$TAU,C)	Normalized cross-correlation
f_M	MODEL FREQUENCY	Model frequency
f_P	PROTOTYPE FREQ.	Prototype frequency
$\omega \ell / U_\infty$	REDUCED FREQ.	Reduced frequency
$S_{ii}(f)$		Power spectrum
S.F. x $S_{ii}(f)$	S.F. x SII(F)	Scale factor times power spectrum
$C_{ij}(f)$		Co-spectrum
$C_{ij}(f)/\sqrt{S_{ii}(f)S_{jj}(f)}$	NCIJ(F)	Normalized co-spectrum
$Q_{ij}(f)$		Quad-spectrum
$Q_{ij}(f)/\sqrt{S_{ii}(f)S_{jj}(f)}$	NQIJ(F)	Normalized quad-spectrum

TABLE I DEFINITION OF SYMBOLS (CONT'D)

ENGINEER SYMBOL	TABULATION SYMBOL	MEANING
$\rho(f)$	MOD. OF COHER. (MOC)	Modulus of coherency, $\sqrt{[NCIJ(F)]^2 + [NQIJ(F)]^2}$
$\emptyset(f)$	PHASE OF COHER. (POC)	Phase of coherency, $Tan^{-1}[NQIJ(F)]/[NCIJ(F)]$
I,J		Indicate transducer number
	MSEC	Milliseconds

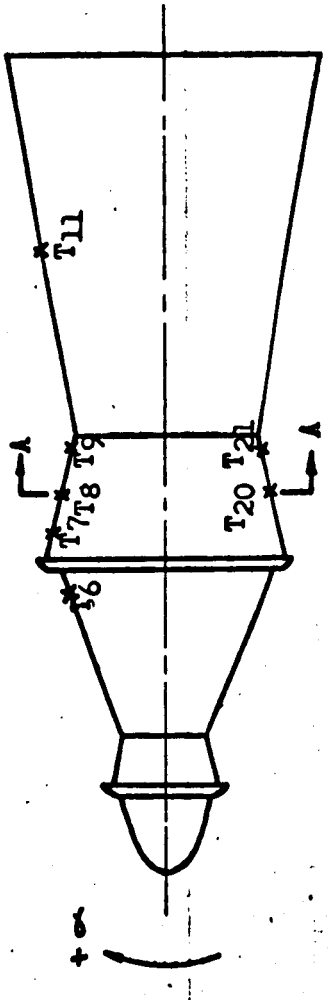
5. TULLAHOMA MA-1 CONFIGURATION, 32% SCALE

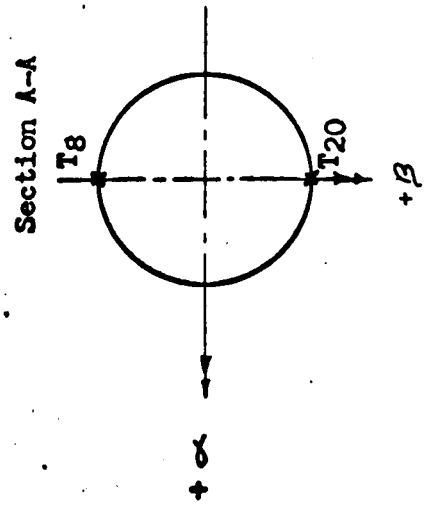
FLUCTUATING PRESSURE DATA

TEST INFORMATION AND DATA REDUCTION PARAMETERS

Wind Tunnel	AEDC 16' x 16' Propulsion
Date of Test	October 1960
Model Size	32%
Sample Rate	4,000/sec.
No. of Samples	12,000
No. of Special Estimates	70
Degrees of Freedom	343
Filter Bandwidth (Prototype Frequency)	17.61 - 18.12 cps
Characteristic Length (Model)	0.854 ft.

TRANSDUCER LOCATION - 32% TULLAHOMA
MA-1 MERCURY-ATLAS CONFIGURATION





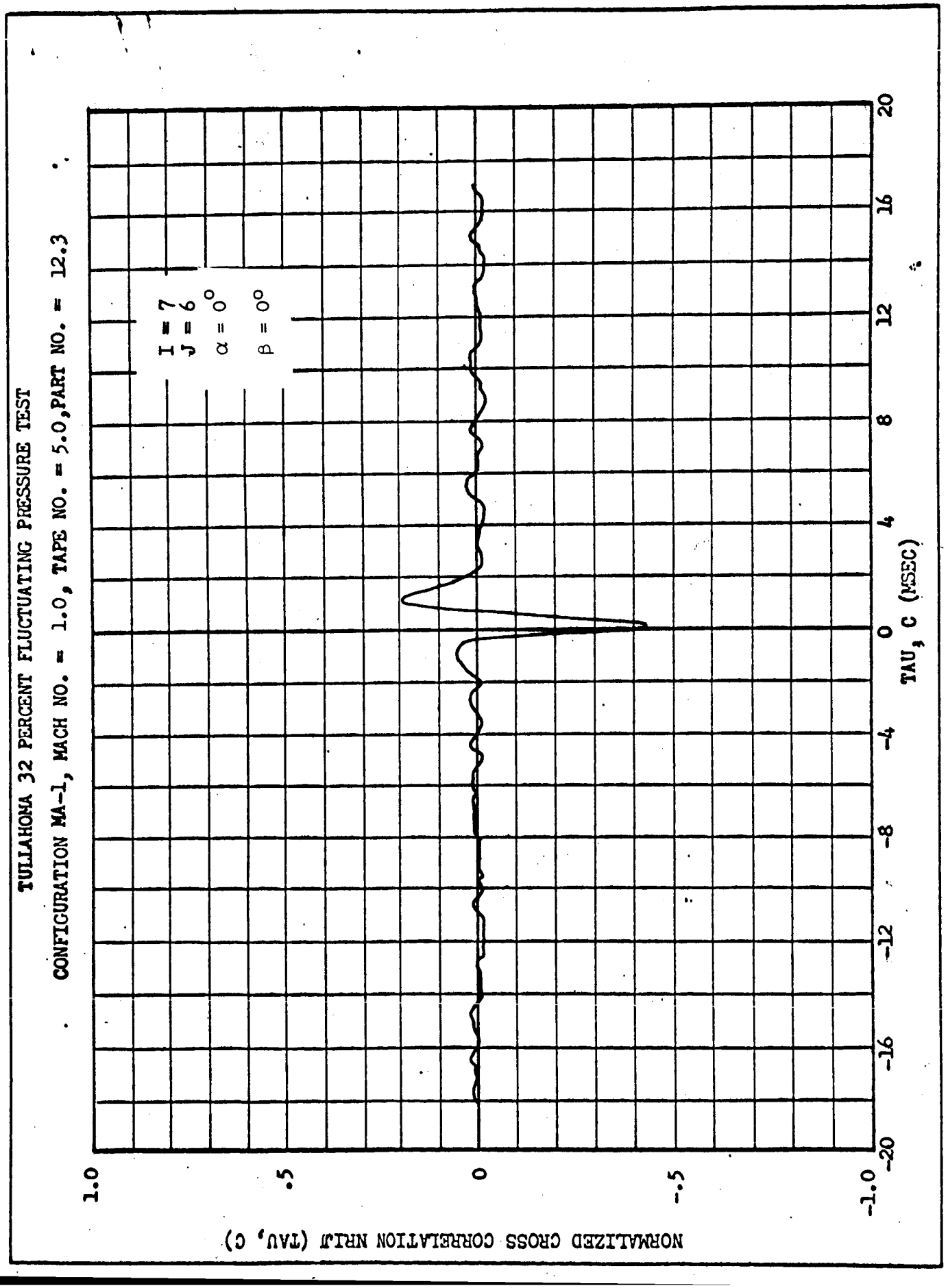
TRANSDUCER	ADAPTER Z-STATION (PROTOTYPE)
T6	105.9 (effective)
T7	99.0
T8	78.0
T9	58.0
T11	-10.0 (effective)
T20	78.0
T21	58.0

INDEX OF PLOTS AND TABULATIONS
TULLAHOMA 32% MERCURY-ATLAS
MA-1 CONFIGURATION

Mach No.	α	β	Correl. I x J	Item	Plot Page	Tabulation Page
1.0	0°	0°	7 x 6	Auto 7 x 7	——	44
				Auto 6 x 6	——	44
				Cross 7 x 6	16	44
				PSD 7 x 7	17	46
				PSD 6 x 6	18	46
				C & Q 7 x 6	19	46
				MOC 7 x 6	——	46
			7 x 6	POC 7 x 6	——	46
			9 x 6	Auto 9 x 9	——	47
				Auto 6 x 6	——	47
				Cross 9 x 6	20	47
				PSD 9 x 9	21	49
				PSD 6 x 6	22	49
				C & Q 9 x 6	23	49
				MOC 9 x 6	——	49
			9 x 6	POC 9 x 6	——	49
			9 x 8	Auto 9 x 9	——	50
				Auto 8 x 8	——	50
				Cross 9 x 8	24	50
				PSD 9 x 9	25	52
				PSD 8 x 8	26	52
				C & Q 9 x 8	27	52

Mach No.	α	β	Correl. I x J	Item	Plot Page	Tabulation Page
				MOC 9 x 8	——	52
1.0	0°	0°	9 x 8	POC 9 x 8	——	52
1.2	0°	0°	7 x 6	Auto 7 x 7	——	53
				Auto 6 x 6	——	53
				Cross 7 x 6	28	53
				PSD 7 x 7	29	55
				PSD 6 x 6	30	55
				C & Q 7 x 6	31	55
				MOC 7 x 6	——	55
			7 x 6	POC 7 x 6	——	55
			9 x 6	Auto 9 x 9	——	56
				Auto 6 x 6	——	56
				Cross 9 x 6	32	56
				PSD 9 x 9	33	58
				PSD 6 x 6	34	58
				C & Q 9 x 6	35	58
				MOC 9 x 6	——	58
1.2			9 x 6	POC 9 x 6	——	58
1.5			7 x 6	Auto 7 x 7	——	59
				Auto 6 x 6	——	59
				Cross 7 x 6	36	59
				PSD 7 x 7	37	61
				PSD 6 x 6	38	61
				C & Q 7 x 6	39	61

Mach No.	α	β	Correl. I x J	Item	Plot Page	Tabulation Page
				MOC 7 x 6	—	61
1.5	0°	0°	7 x 6	POC 7 x 6	—	61
1.5	0°	0°	9 x 6	Auto 9 x 9	—	62
				Auto 6 x 6	—	62
				Cross 9 x 6	40	62
				PSD 9 x 9	41	64
				PSD 6 x 6	42	64
				C & Q 9 x 6	43	64
				MOC 9 x 6	—	64
1.5	0°	0°	9 x 6	POC 9 x 6	—	64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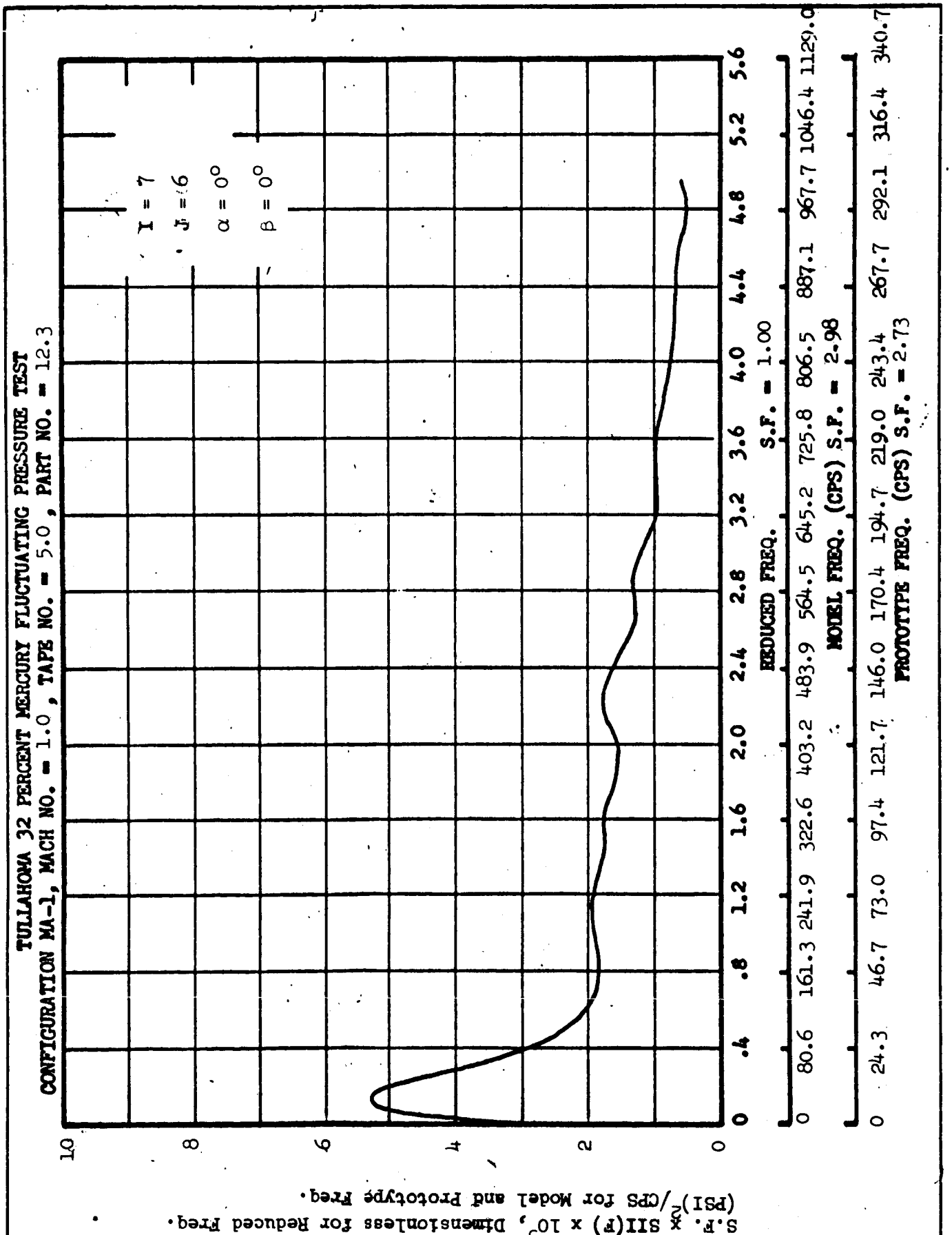
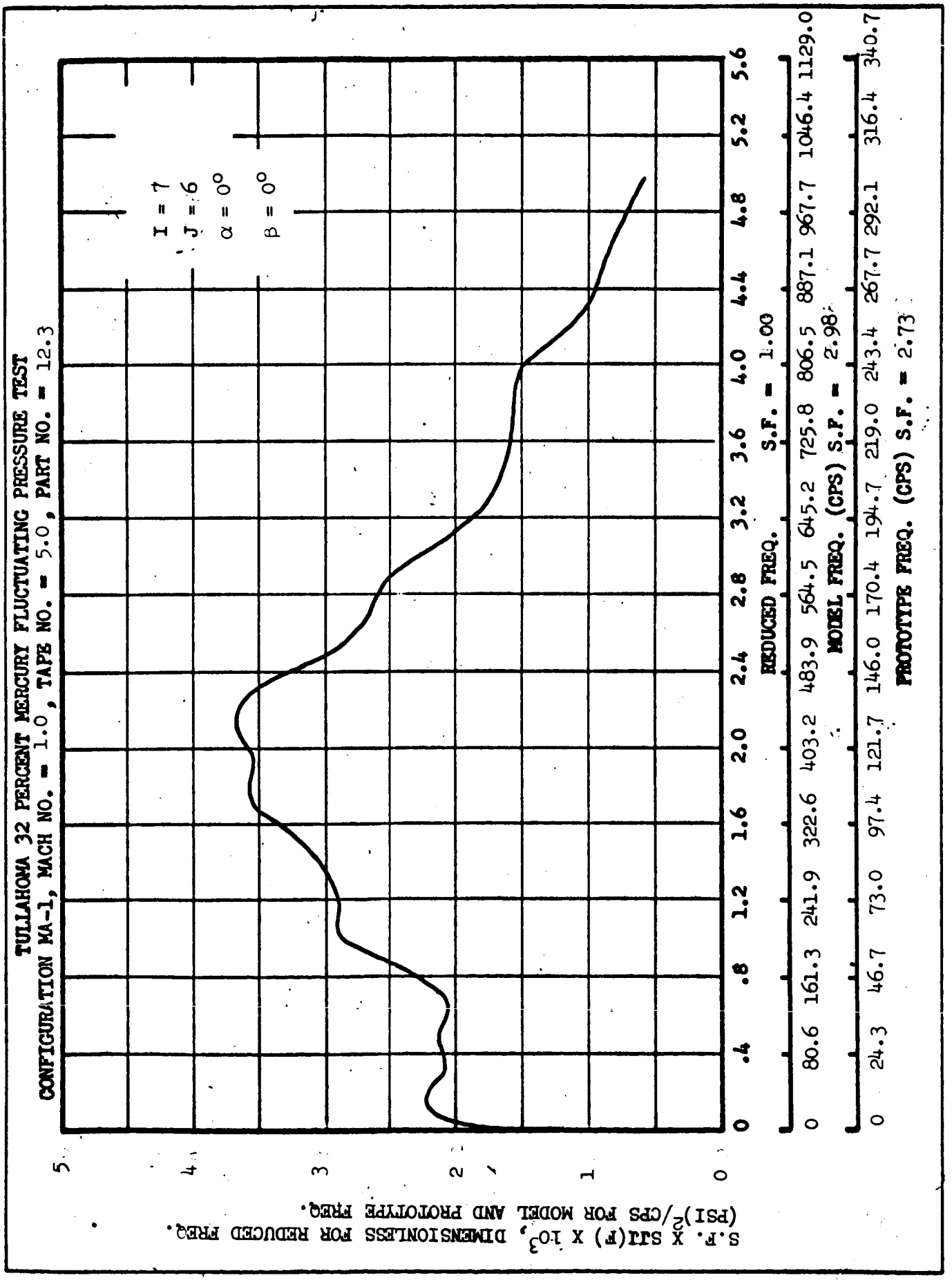
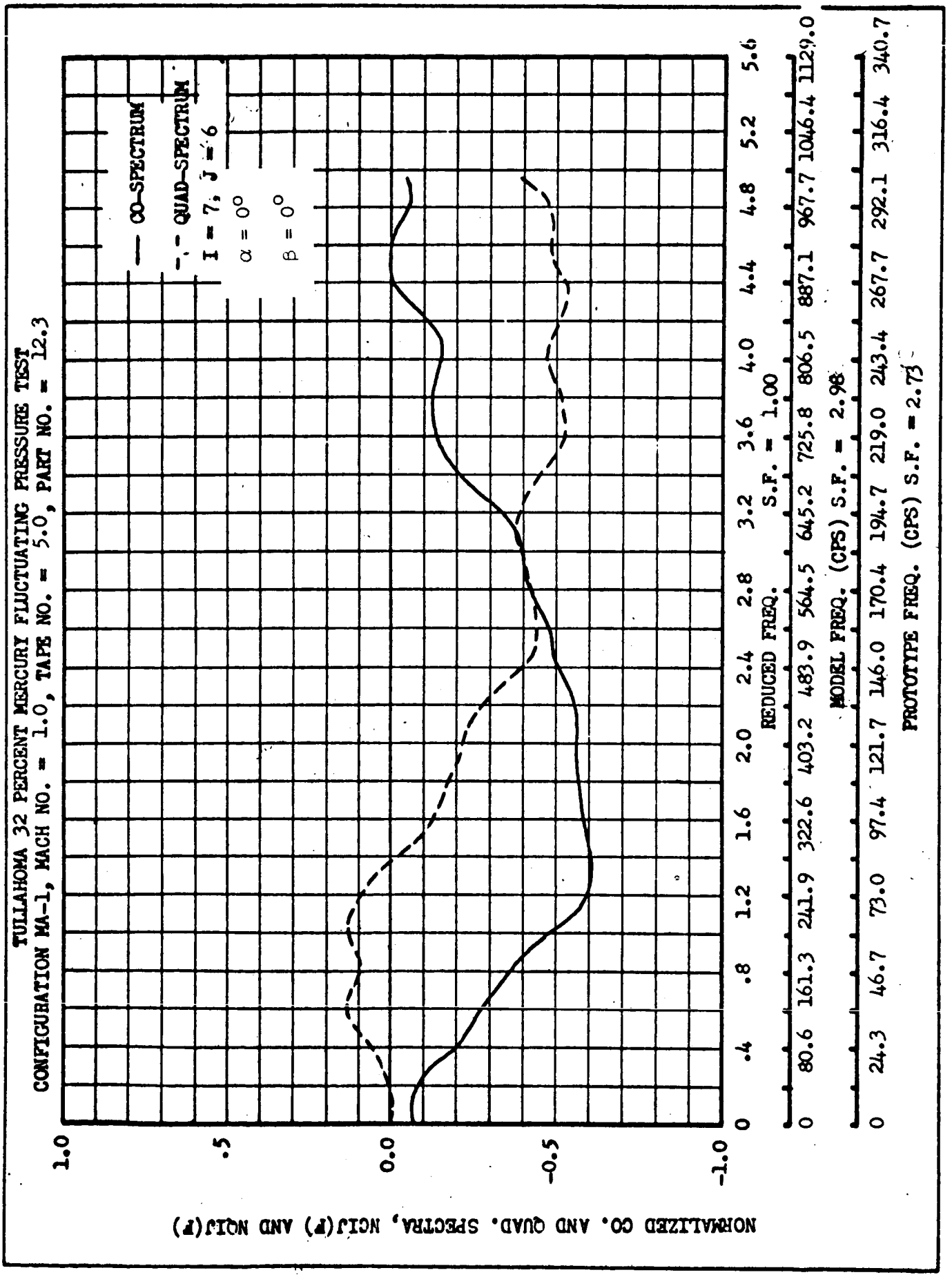
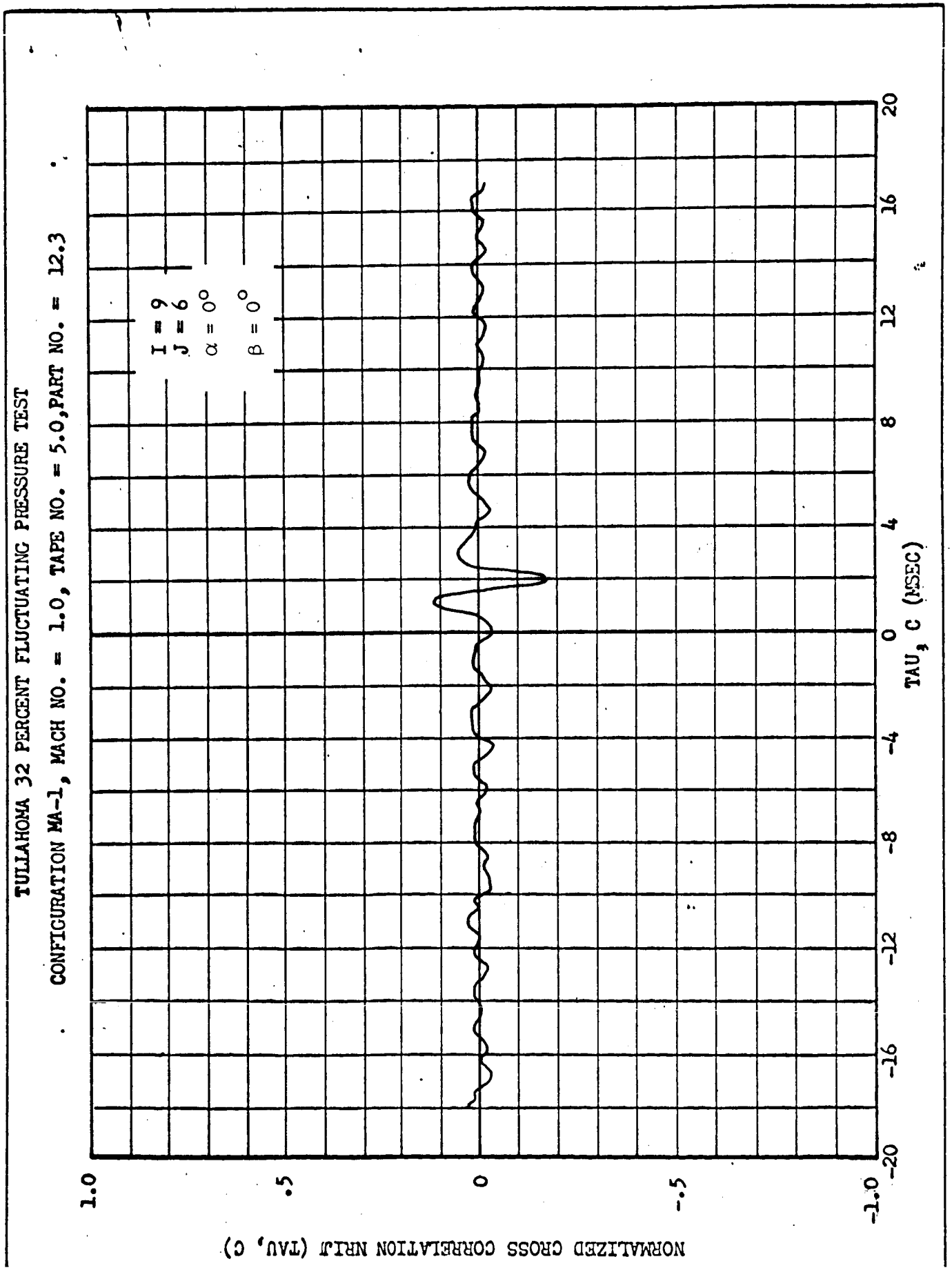
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3
I = 7
J = 6
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)
1.0
.5
0
-.5
-1.0
TAU, C (MSEC)
20
16
12
8
4
0
-4
-8
-12
-16
-20


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0 , TAPE NO. = 5.0 , PART NO. = 12.3
I = 7
J = 6
α = 0°
β = 0°
S.F. = 1.00
REDUCED FREQ.
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
MODEL FREQ. (CPS) S.F. = 2.98
0 24.3 46.7 73.0 97.4 121.7 146.0 170.4 194.7 219.0 243.4 267.7 292.1 316.4 340.7
PROTOTYPE FREQ. (CPS) S.F. = 2.73
0 2 4 6 8 10
S.F. x SII(F) x 10³, Dimensionless for Reduced Freq.
(PSI)²/CPS for Model and Prototype Freq.


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3
I = 7
J = 6
α = 0°
β = 0°
S.F. X S11(F) X 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ.
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
MODEL FREQ. (CPS) S.F. = 2.98
0 24.3 46.7 73.0 97.4 121.7 146.0 170.4 194.7 219.0 243.4 267.7 292.1 316.4 340.7
PROTOTYPE FREQ. (CPS) S.F. = 2.73
0 1 2 3 4 5


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3
— CO-SPECTRUM
-.- QUAD-SPECTRUM
I = 7, J = 6
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA, NCIJ(P) AND NQIJ(P)
1.0
.5
0.0
-0.5
-1.0
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ. S.F. = 1.00
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
MODEL FREQ. (CPS) S.F. = 2.98
0 24.3 46.7 73.0 97.4 121.7 146.0 170.4 194.7 219.0 243.4 267.7 292.1 316.4 340.7
PROTOTYPE FREQ. (CPS) S.F. = 2.73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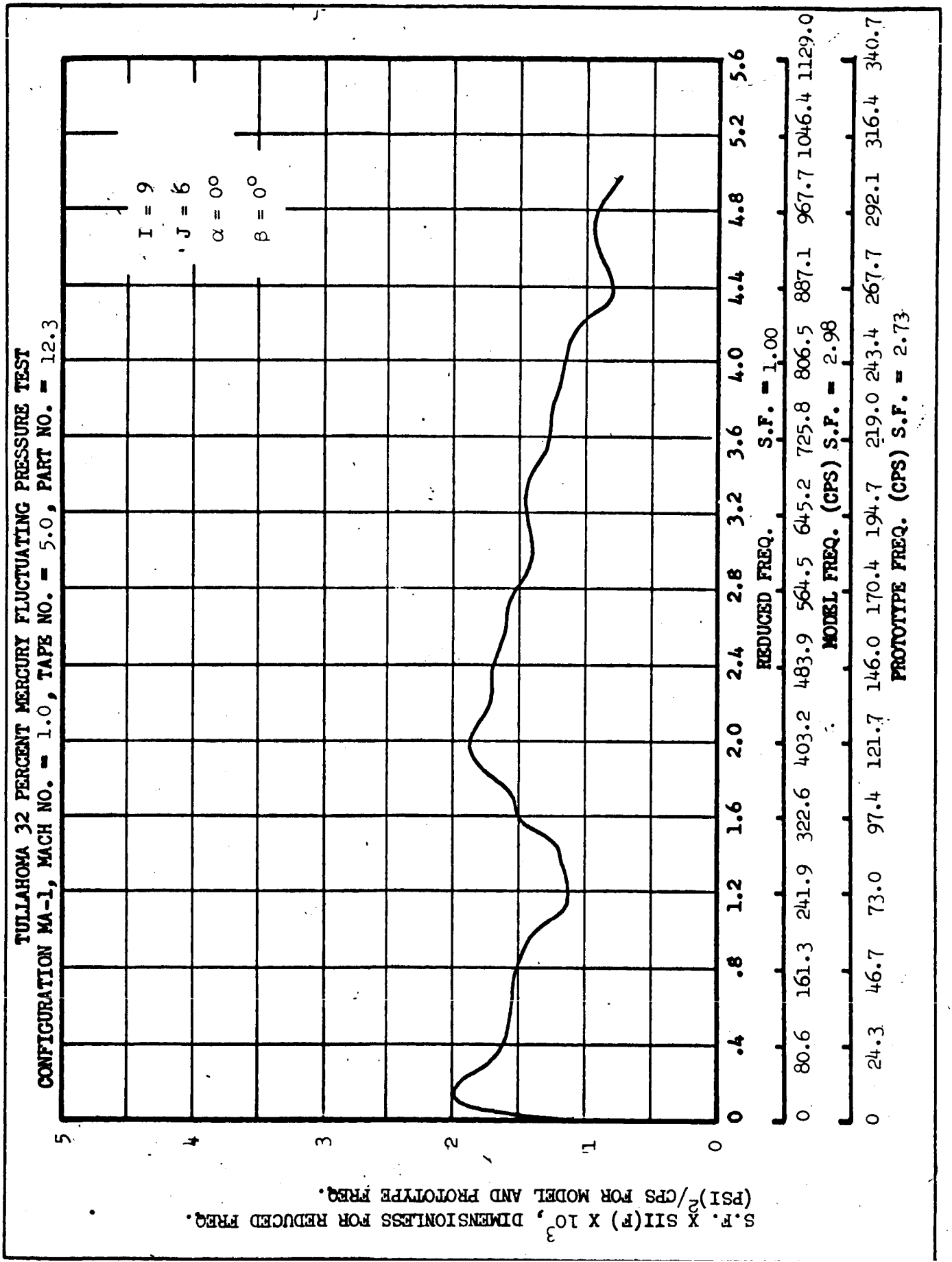
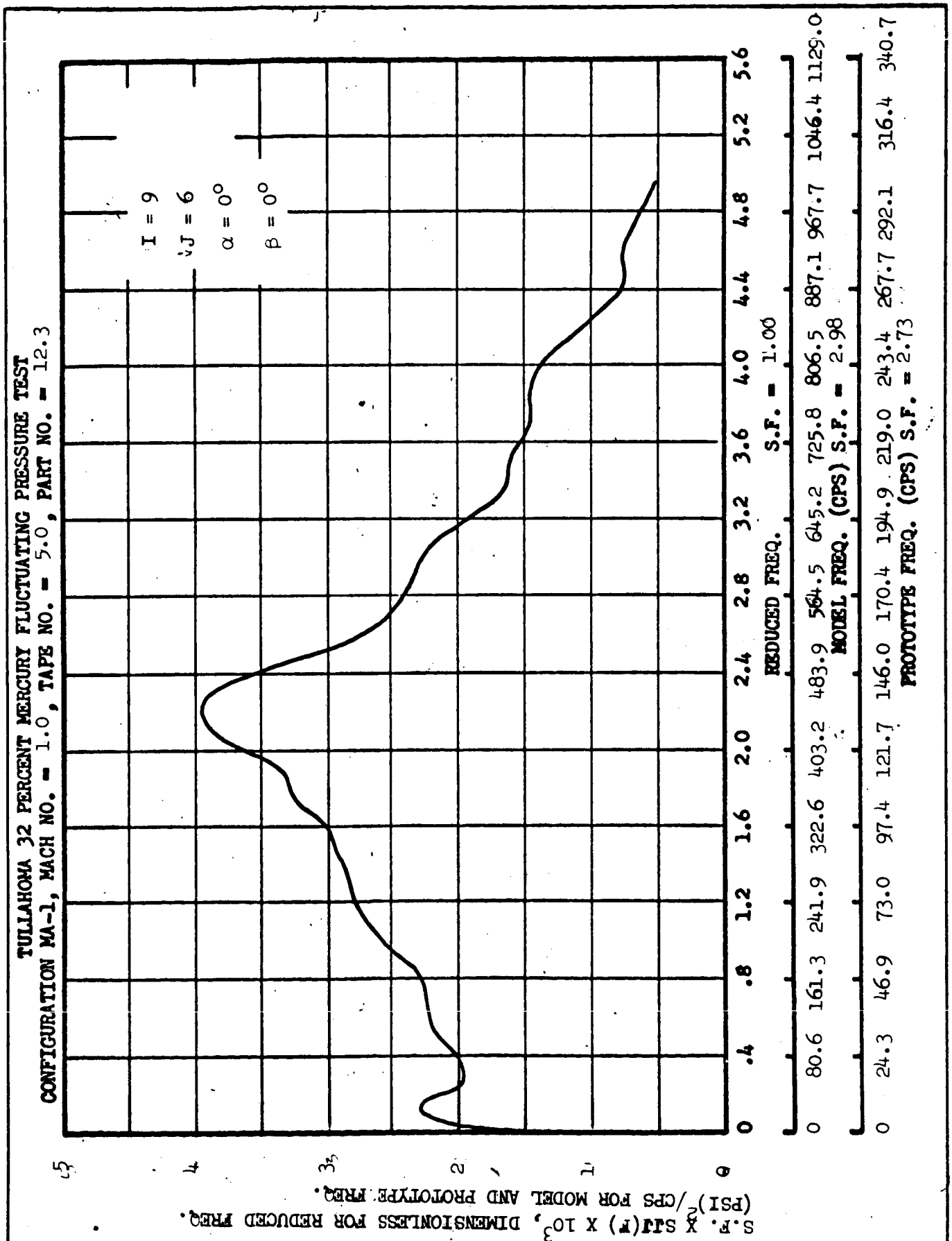
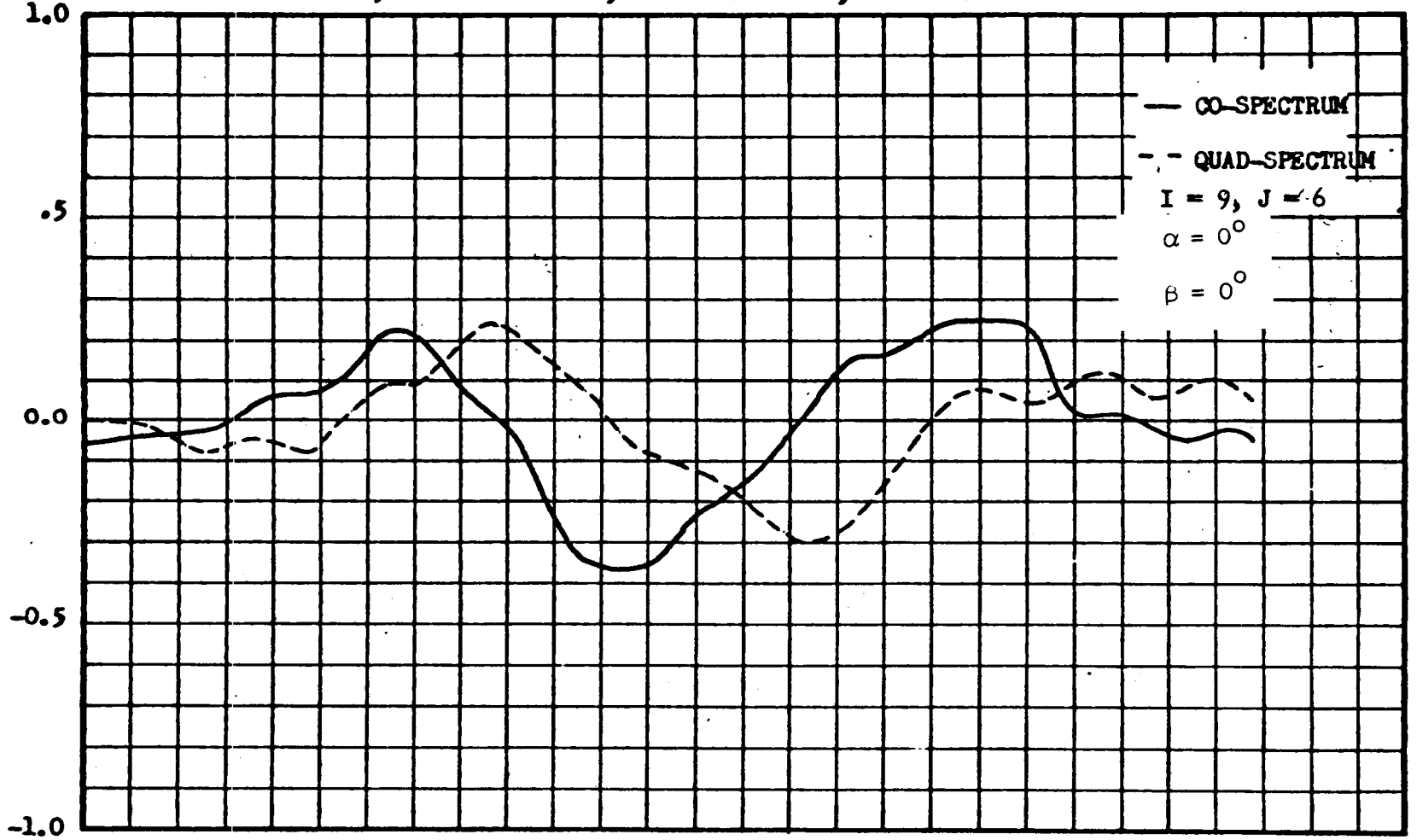
I = 9
J = 6
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3
I = 9
J = 6
α = 0°
β = 0°
S.F. = 1.00
REDUCED FREQ. 0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
MODEL FREQ. (CPS) S.F. = 2.98
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
PROTOTYPE FREQ. (CPS) S.F. = 2.73
0 24.3 46.7 73.0 97.4 121.7 146.0 170.4 194.7 219.0 243.4 267.7 292.1 316.4 340.7
S.F. X SII(F) X 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
5
4
3
2
1
0


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3
I = 9
J = 6
α = 0°
β = 0°
S.F. X Sff(F) X 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ.
S.F. = 1.00
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
MODEL FREQ. (CPS) S.F. = 2.98
0 24.3 46.9 73.0 97.4 121.7 146.0 170.4 194.9 219.0 243.4 267.7 292.1 316.4 340.7
PROTOTYPE FREQ. (CPS) S.F. = 2.73
0 1 2 3 4 5

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3



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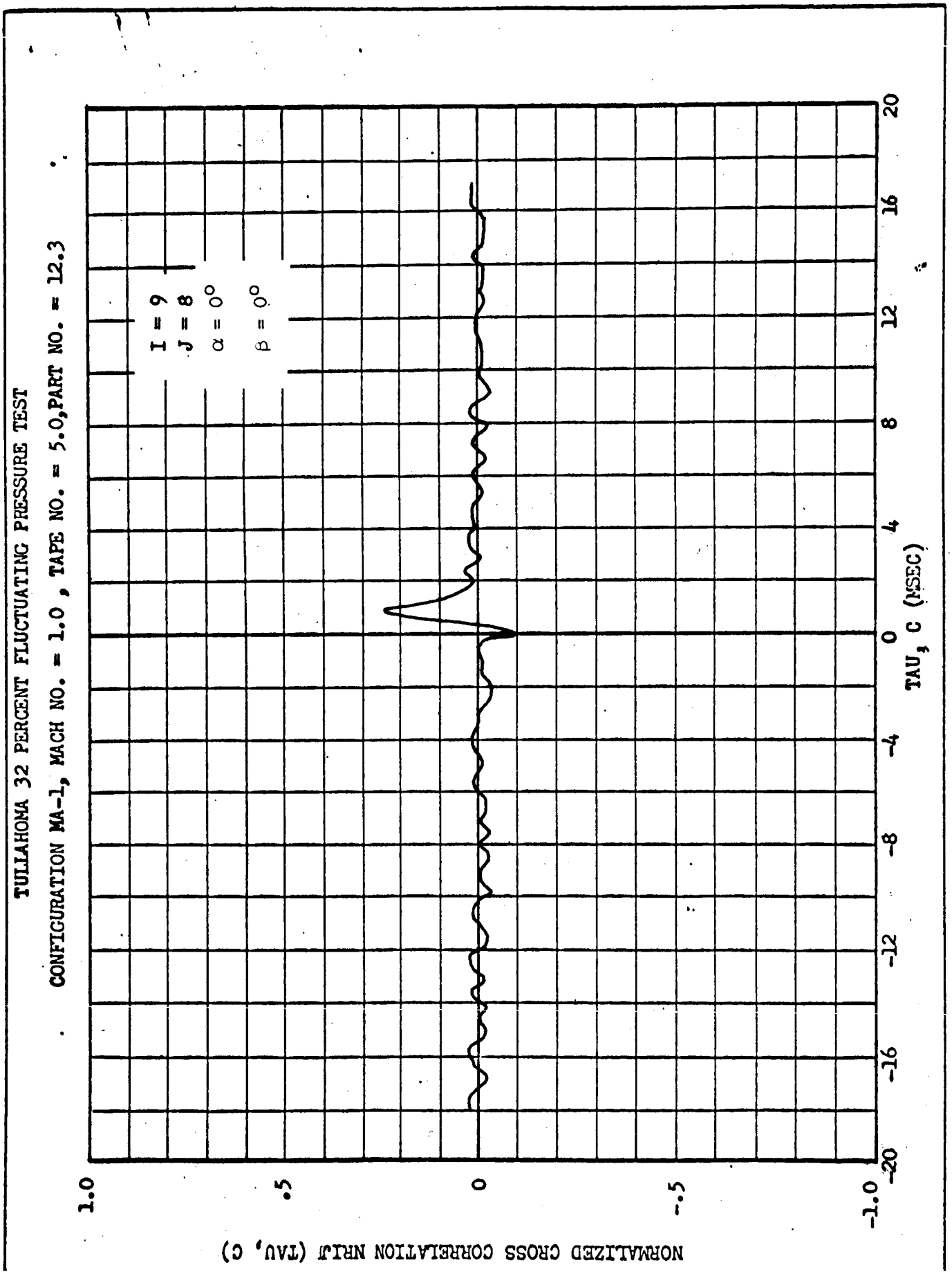
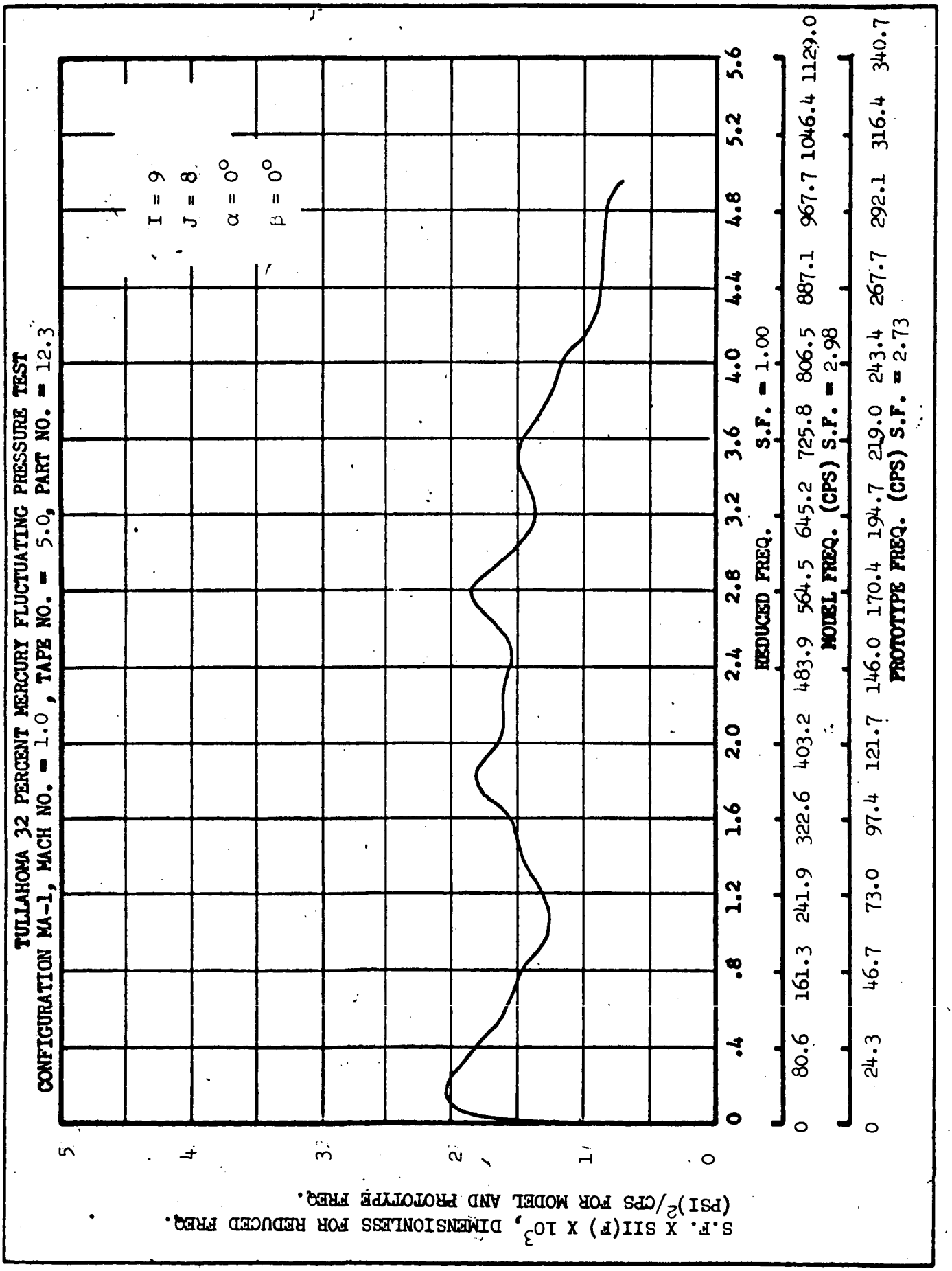
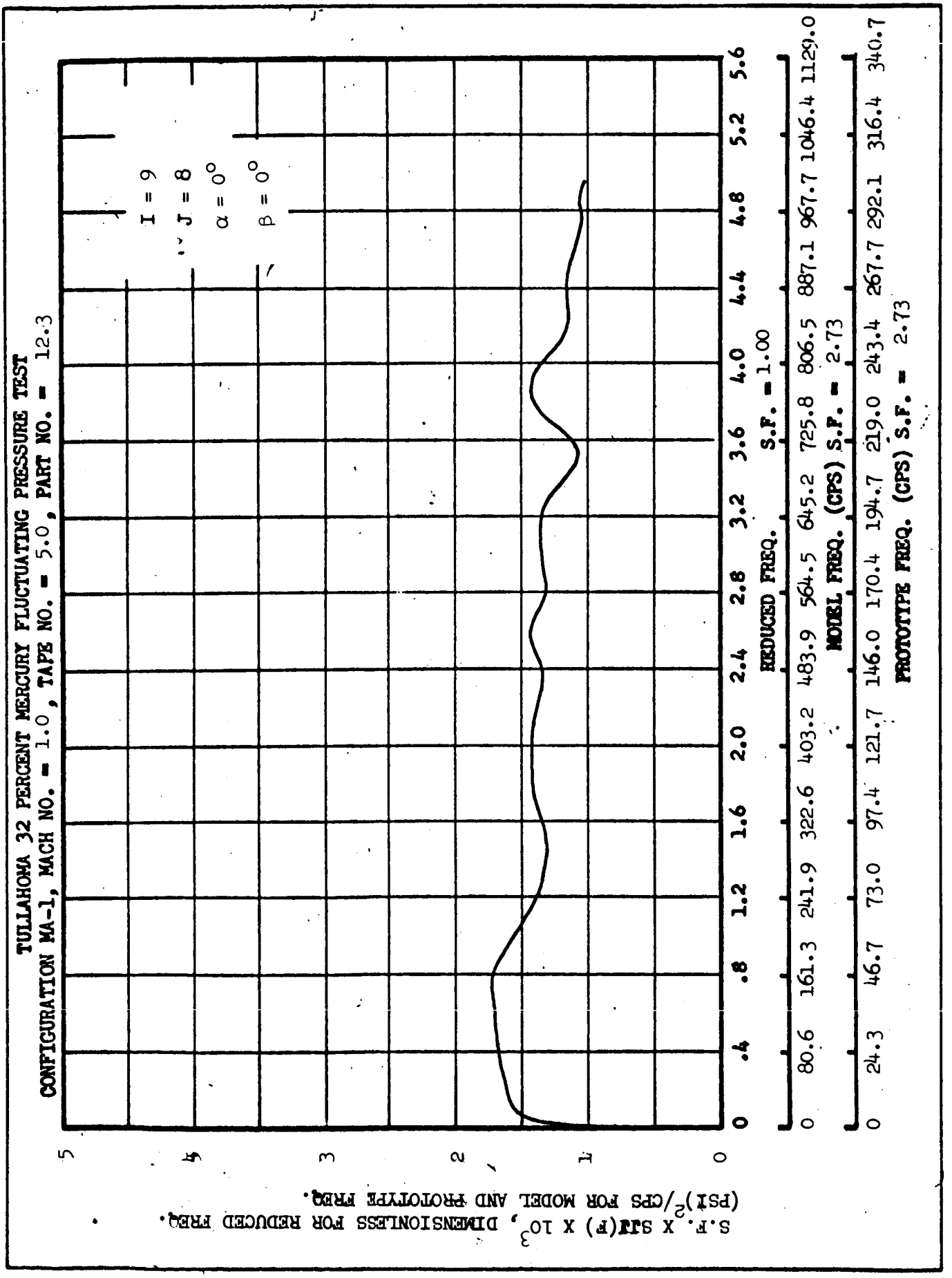

TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0 , TAPE NO. = 5.0,PART NO. = 12.3
I = 9
J = 8
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0 , TAPE NO. = 5.0, PART NO. = 12.3
I = 9
J = 8
α = 0°
β = 0°
S.F. X SII(F) X 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
REDUCED FREQ. S.F. = 1.00
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
MODEL FREQ. (CPS) S.F. = 2.98
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
PROTOTYPE FREQ. (CPS) S.F. = 2.73
0 24.3 46.7 73.0 97.4 121.7 146.0 170.4 194.7 219.0 243.4 267.7 292.1 316.4 340.7
0 1 2 3 4 5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CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3
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α = 0°
β = 0°
S.F. X SII(F) X 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
5
4
3
2
1
0
REDUCED FREQ.
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
S.F. = 1.00
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
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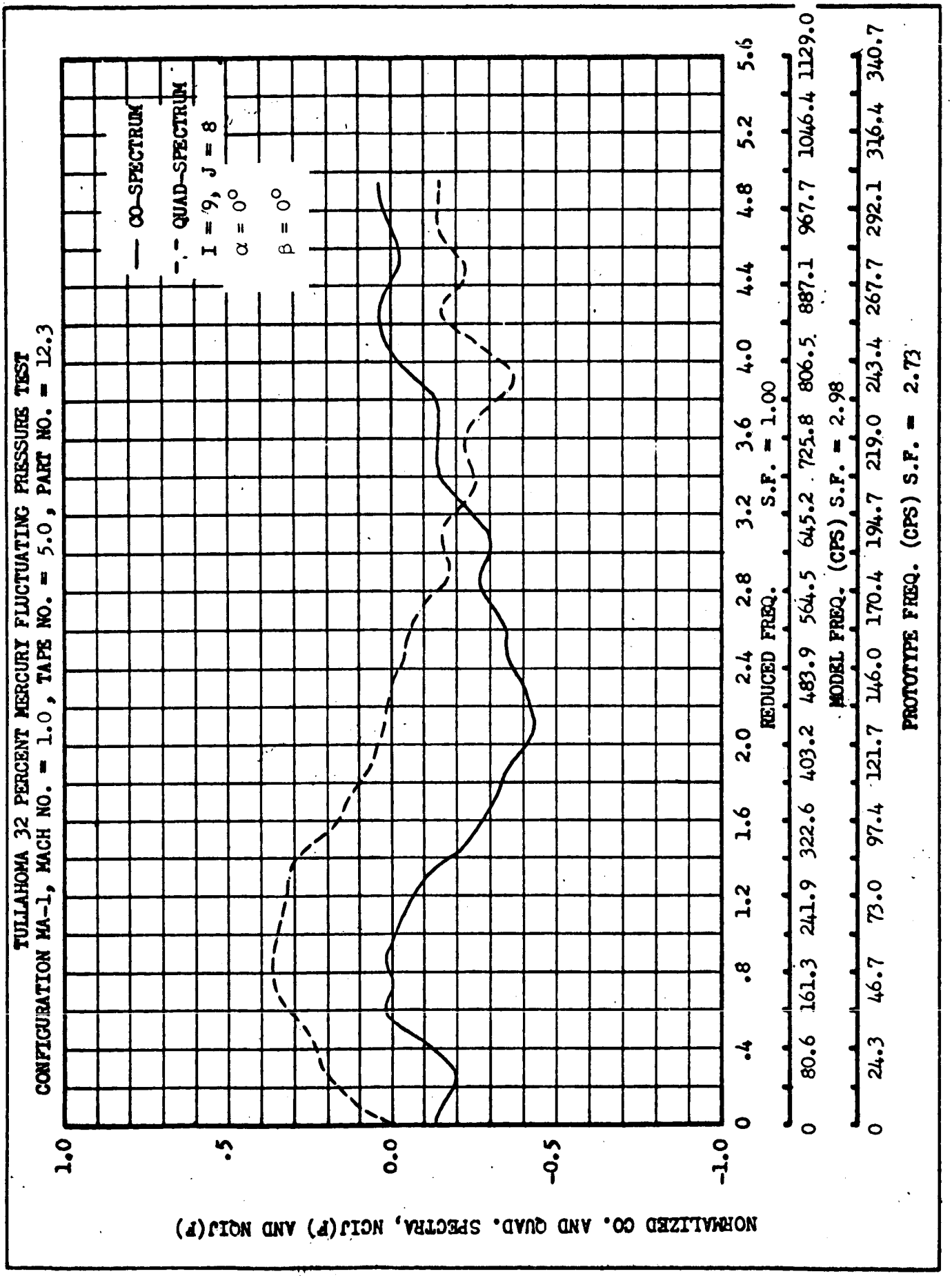
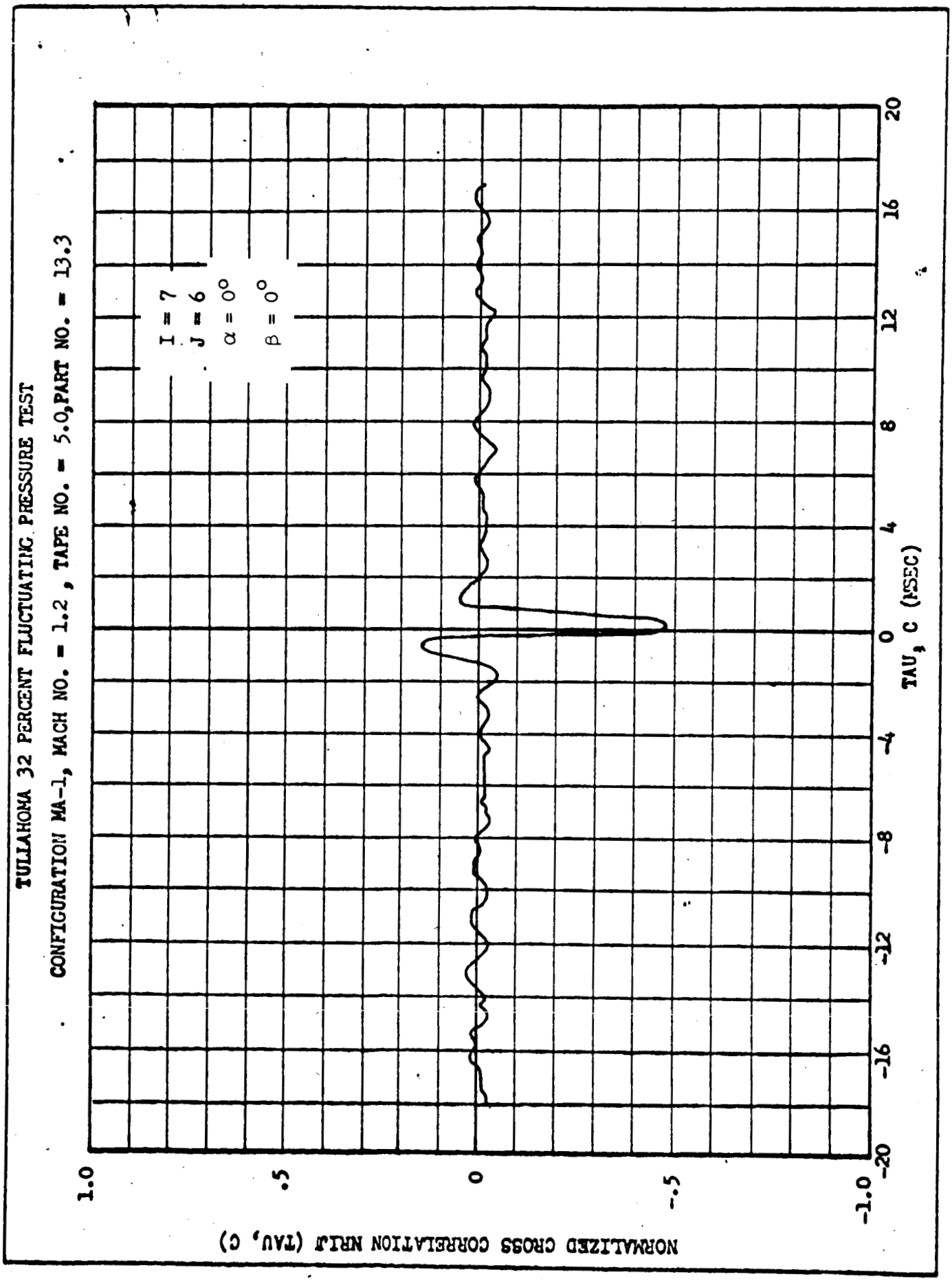
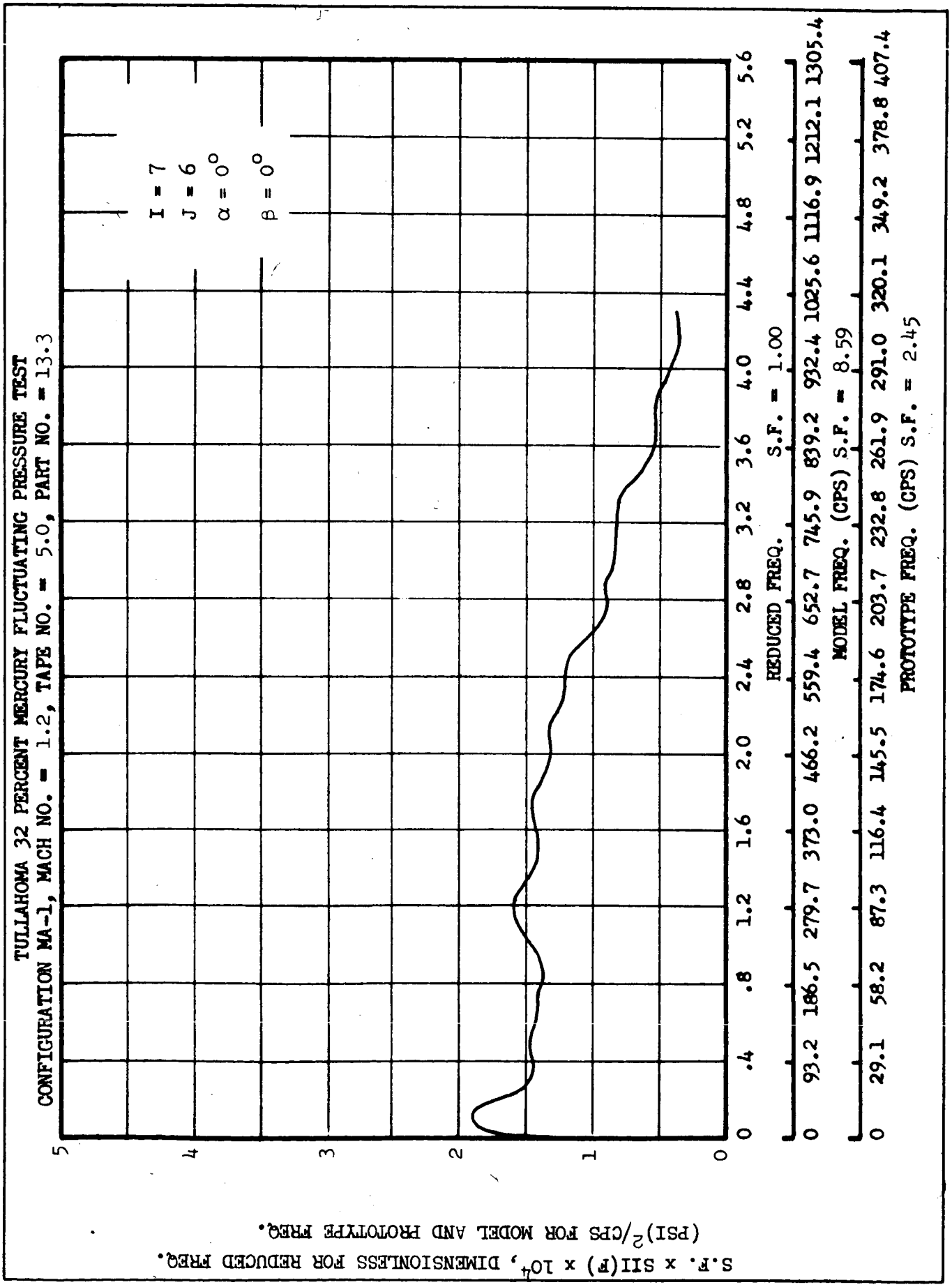
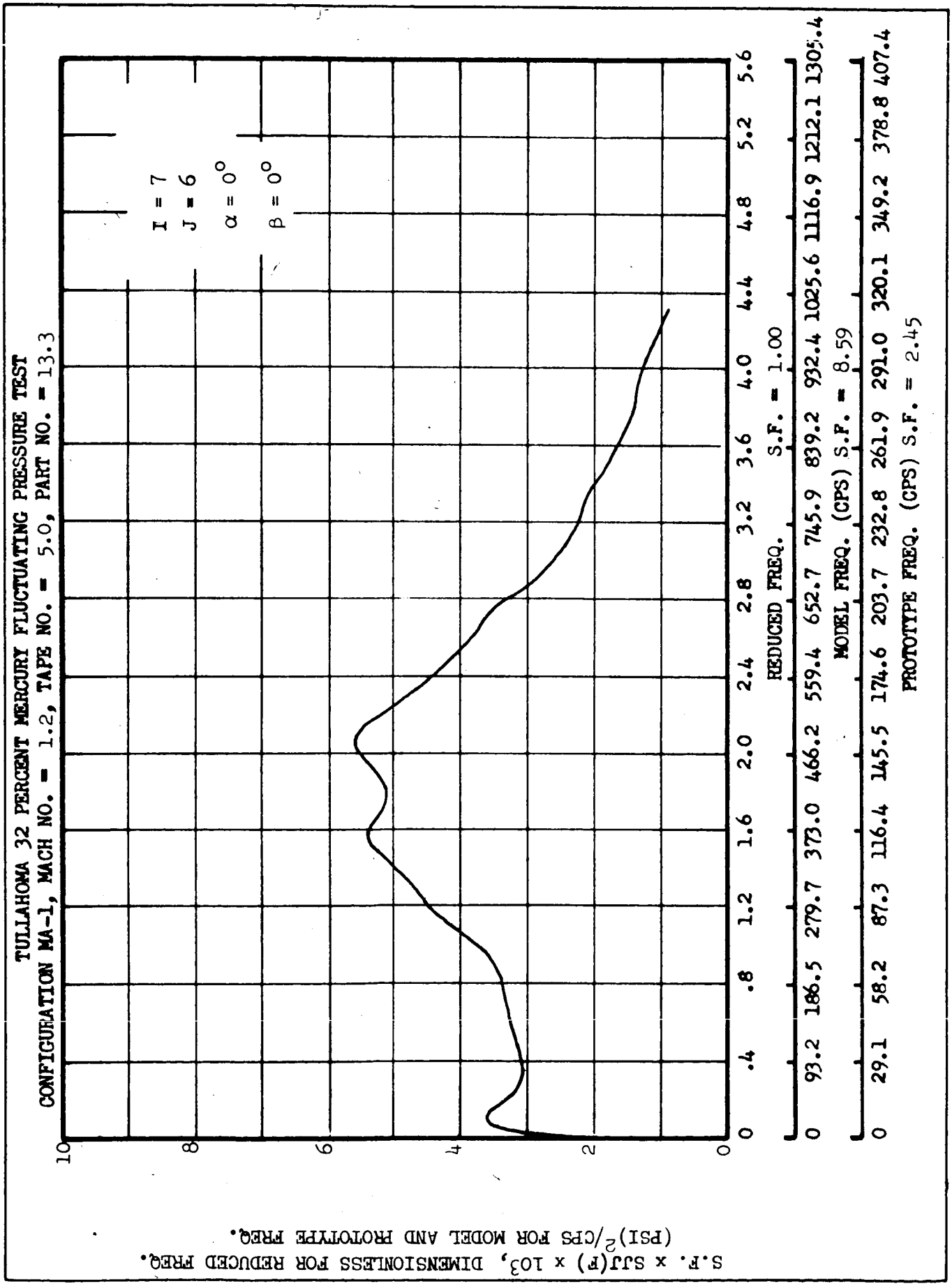
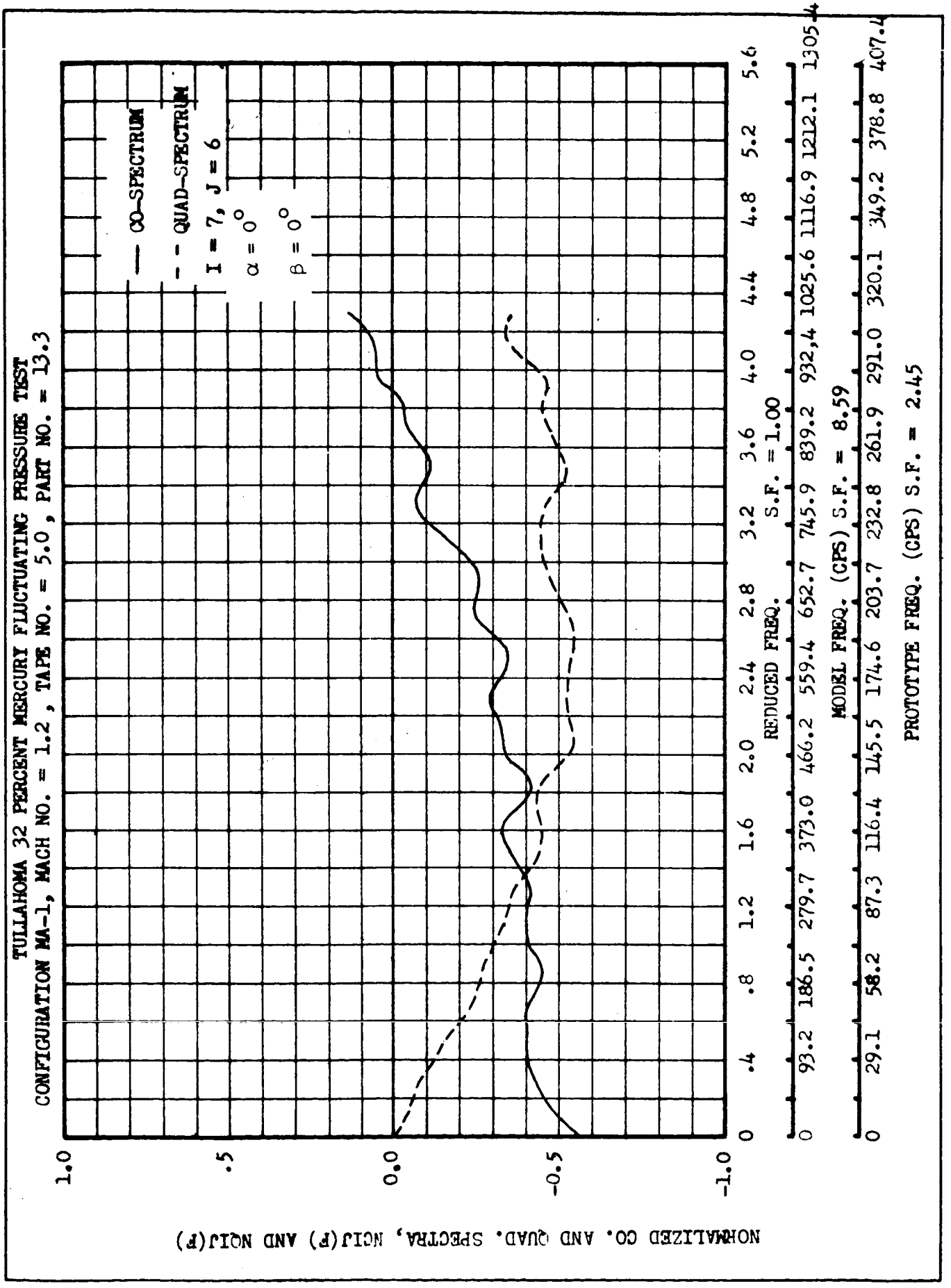
0 24.3 46.7 73.0 97.4 121.7 146.0 170.4 194.7 219.0 243.4 267.7 292.1 316.4 340.7
PROTOTYPE FREQ. (CPS) S.F. = 2.73

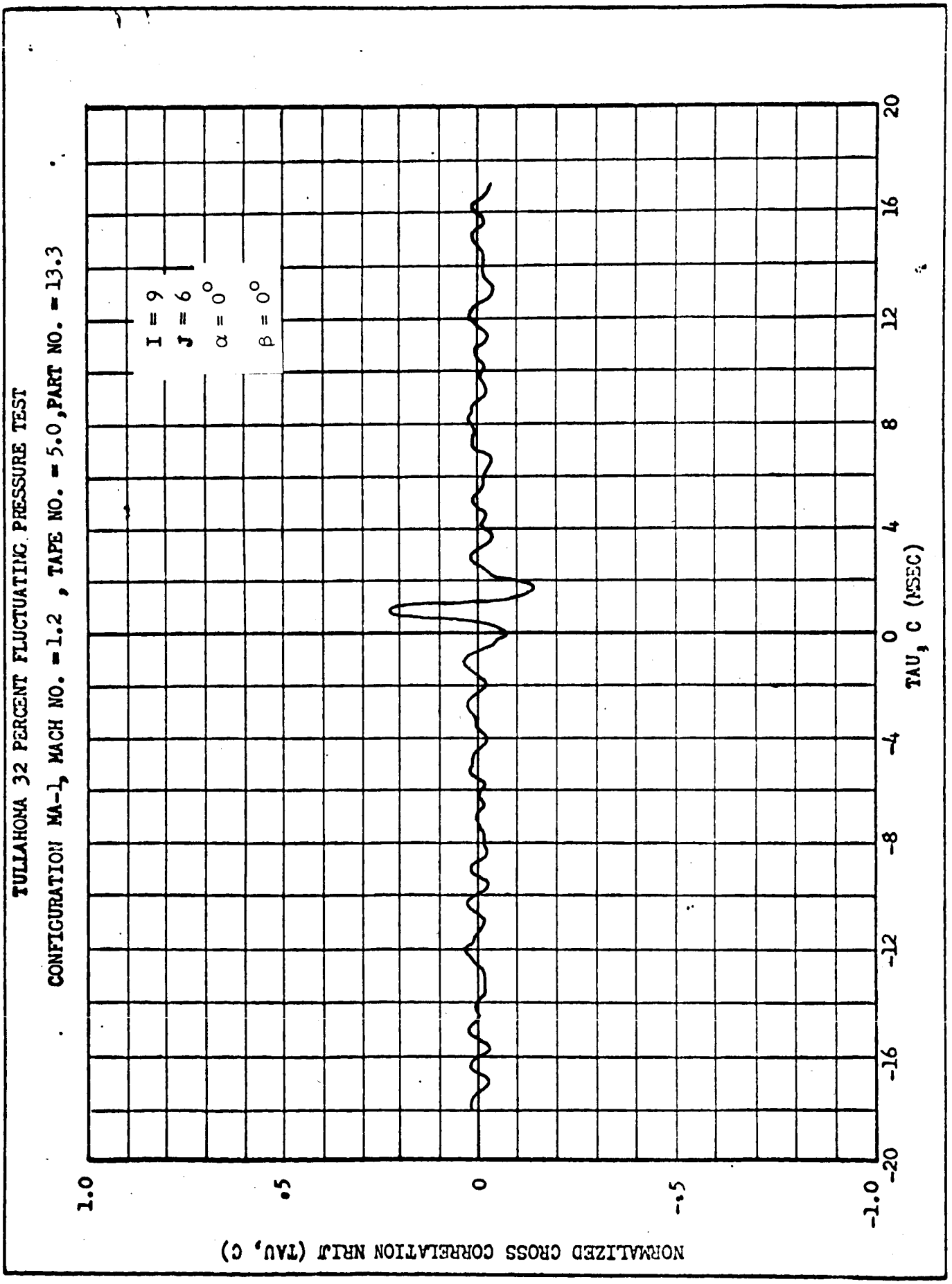

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPS NO. = 5.0, PART NO. = 12.3
— CO-SPECTRUM
- - QUAD-SPECTRUM
I = 9, J = 8
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA, NCIJ(P) AND NQIJ(P)
1.0
.5
0.0
-0.5
-1.0
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ. S.F. = 1.00
0 80.6 161.3 241.9 322.6 403.2 483.9 564.5 645.2 725.8 806.5 887.1 967.7 1046.4 1129.0
MODEL FREQ. (CPS) S.F. = 2.98
0 24.3 46.7 73.0 97.4 121.7 146.0 170.4 194.7 219.0 243.4 267.7 292.1 316.4 340.7
PROTOTYPE FREQ. (CPS) S.F. = 2.73

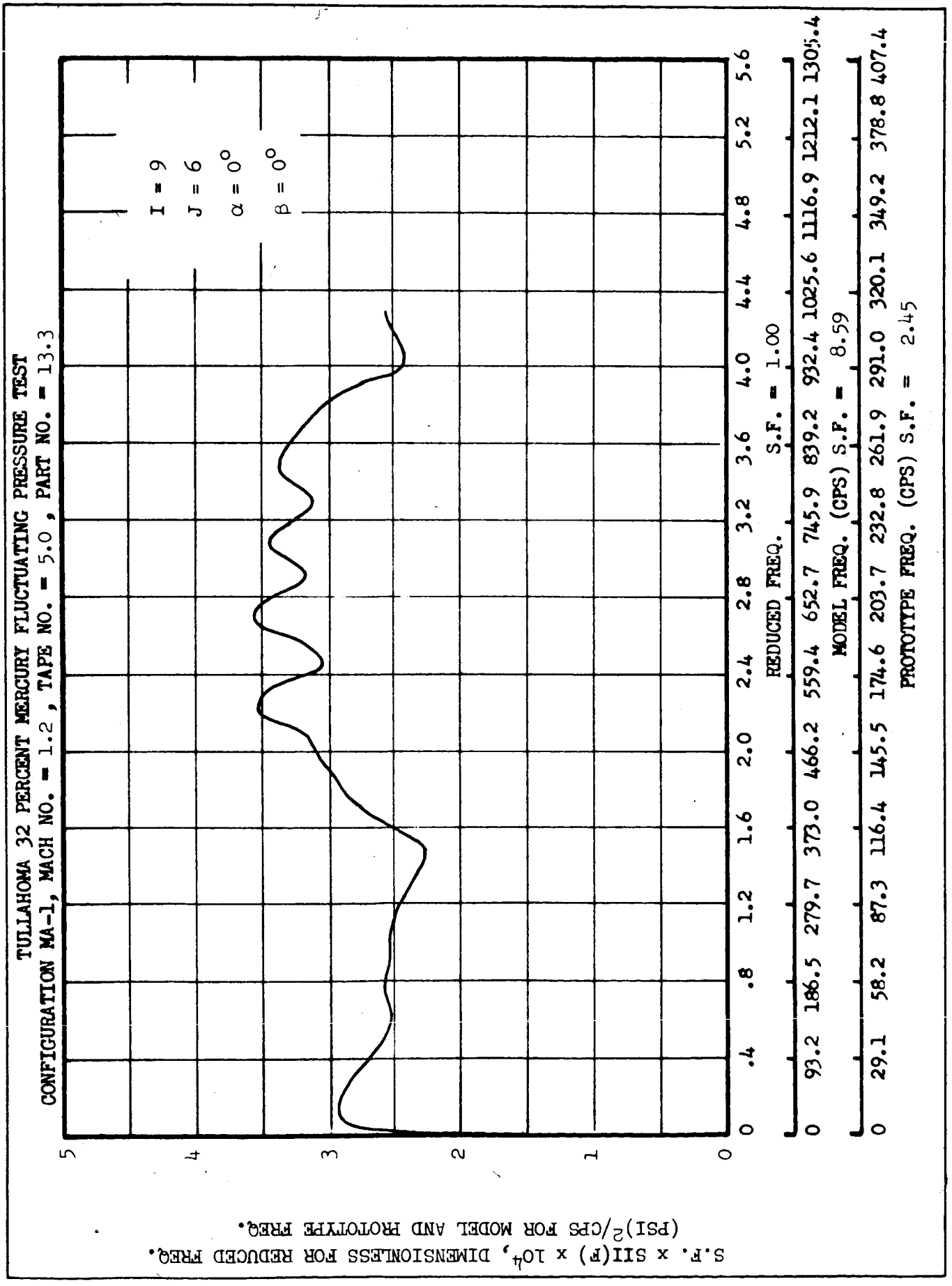

TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2 , TAPE NO. = 5.0,PART NO. = 13.3
I = 7
J = 6
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)

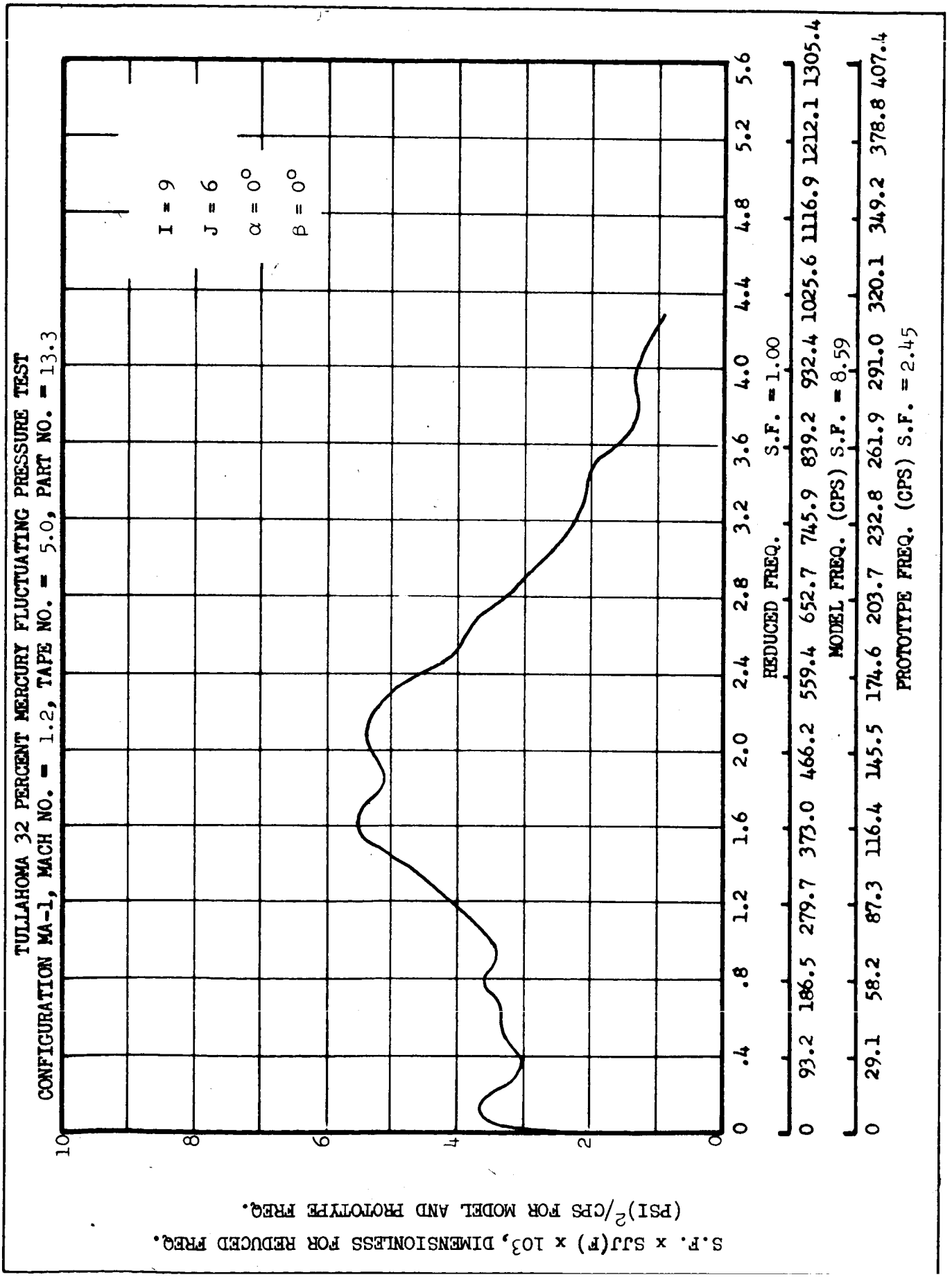

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2, TAPE NO. = 5.0, PART NO. = 13.3
I = 7
J = 6
α = 0°
β = 0°
S.F. x SII(F) x 10⁴, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
REDUCED FREQ. S.F. = 1.00
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
MODEL FREQ. (CPS) S.F. = 8.59
0 93.2 186.5 279.7 373.0 466.2 559.4 652.7 745.9 839.2 932.4 1025.6 1116.9 1212.1 1305.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45
0 29.1 58.2 87.3 116.4 145.5 174.6 203.7 232.8 261.9 291.0 320.1 349.2 378.8 407.4
0 1 2 3 4 5

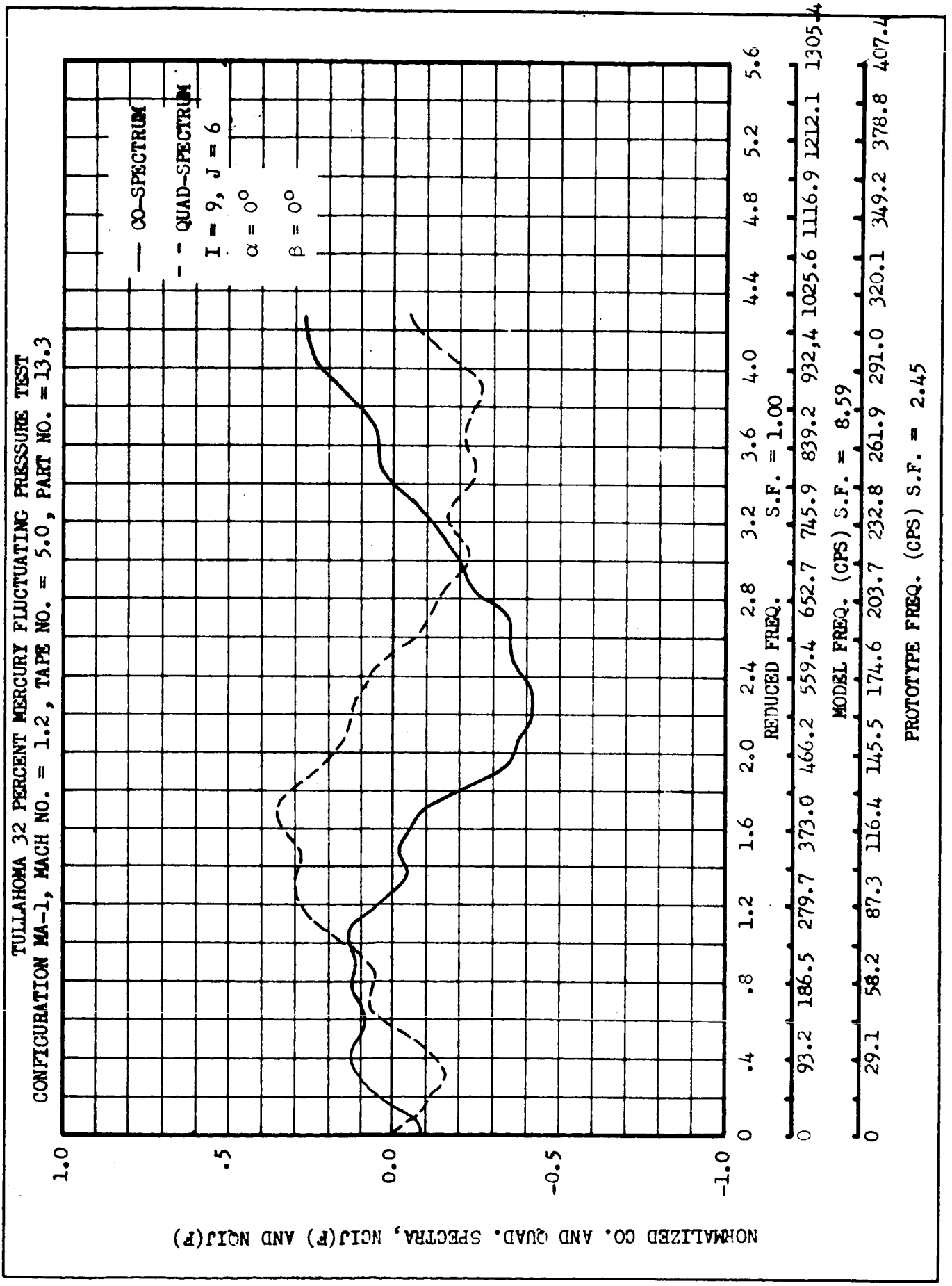

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2, TAPE NO. = 5.0, PART NO. = 13.3
I = 7
J = 6
α = 0°
β = 0°
S.F. x sLL(F) x 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
REDUCED FREQ. S.F. = 1.00
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
MODEL FREQ. (CPS) S.F. = 8.59
0 93.2 186.5 279.7 373.0 466.2 559.4 652.7 745.9 839.2 932.4 1025.6 1116.9 1212.1 1305.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45
0 29.1 58.2 87.3 116.4 145.5 174.6 203.7 232.8 261.9 291.0 320.1 349.2 378.8 407.4
0 2 4 6 8 10

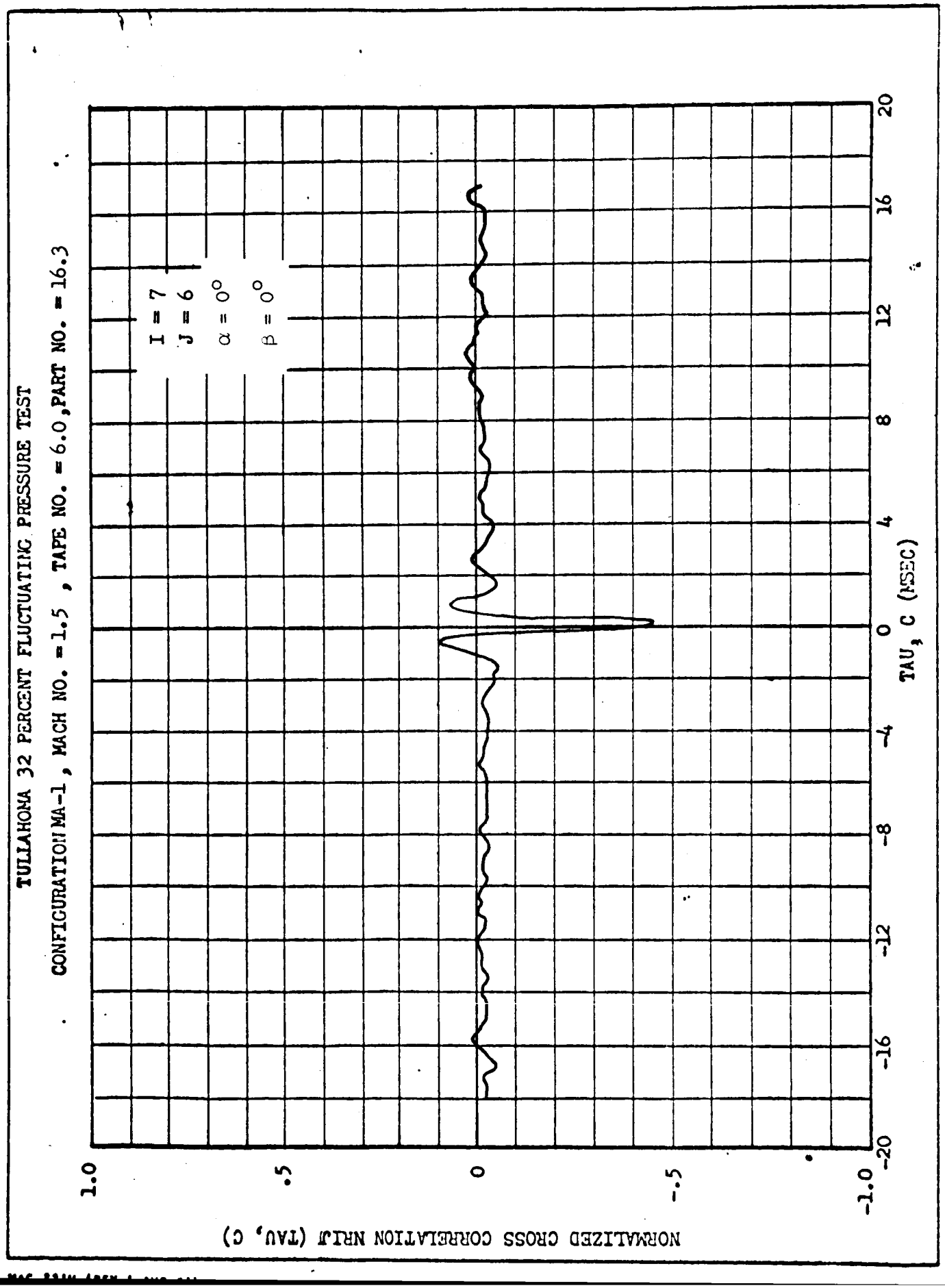

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2 , TAPE NO. = 5.0 , PART NO. = 13.3
— CO-SPECTRUM
- - QUAD-SPECTRUM
I = 7, J = 6
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA, NCIJ(F) AND NQIJ(F)
1.0
.5
0.0
-0.5
-1.0
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ. S.F. = 1.00
0 93.2 186.5 279.7 373.0 466.2 559.4 652.7 745.9 839.2 932.4 1025.6 1116.9 1212.1 1305.4
MODEL FREQ. (CPS) S.F. = 8.59
0 29.1 58.2 87.3 116.4 145.5 174.6 203.7 232.8 261.9 291.0 320.1 349.2 378.8 407.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45

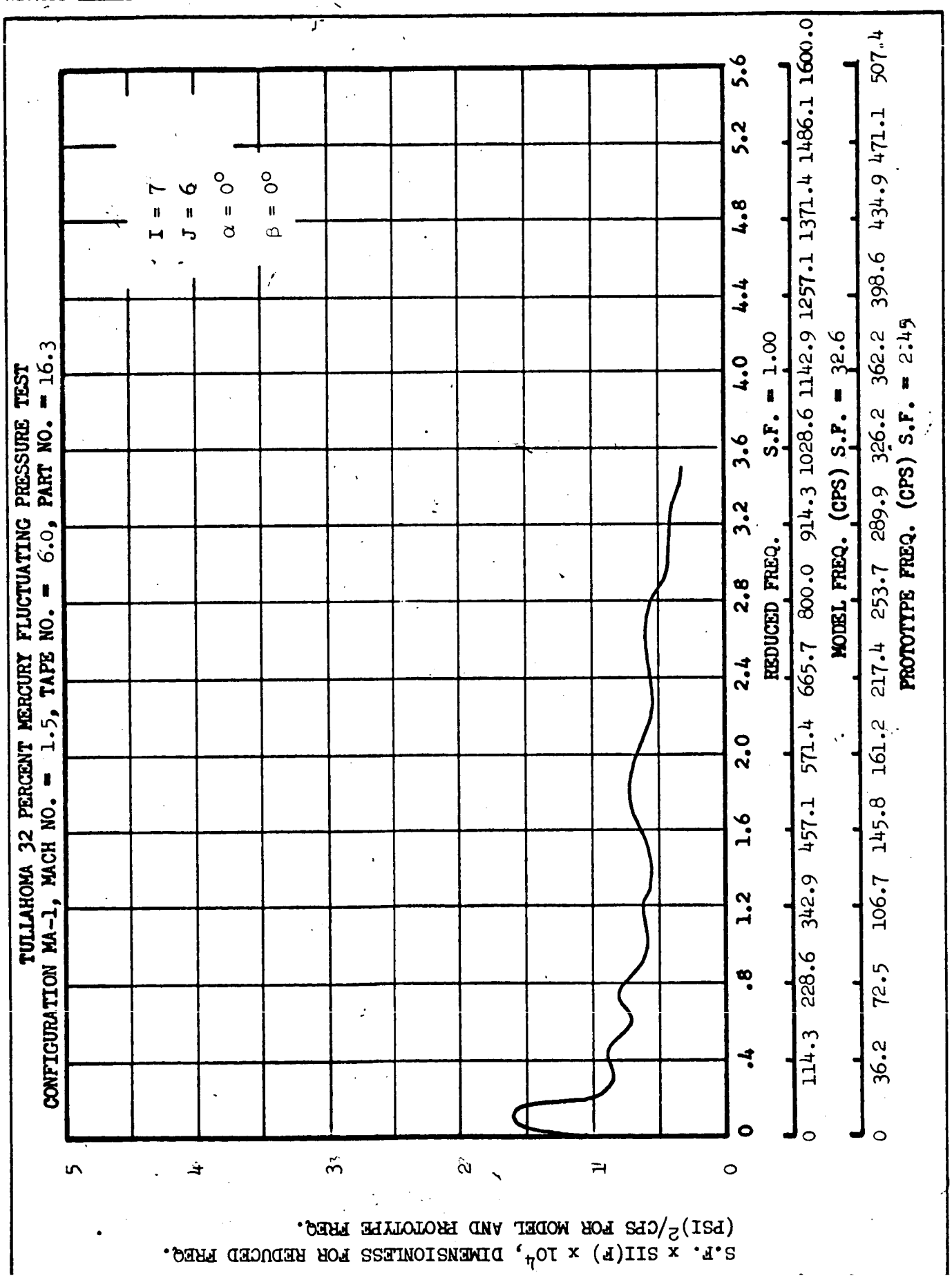

TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2 , TAPE NO. = 5.0, PART NO. = 13.3
I = 9
J = 6
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)
1.0
.5
0
-.5
-1.0
TAU, C (MSEC)
20
16
12
8
4
0
-4
-8
-12
-16
-20

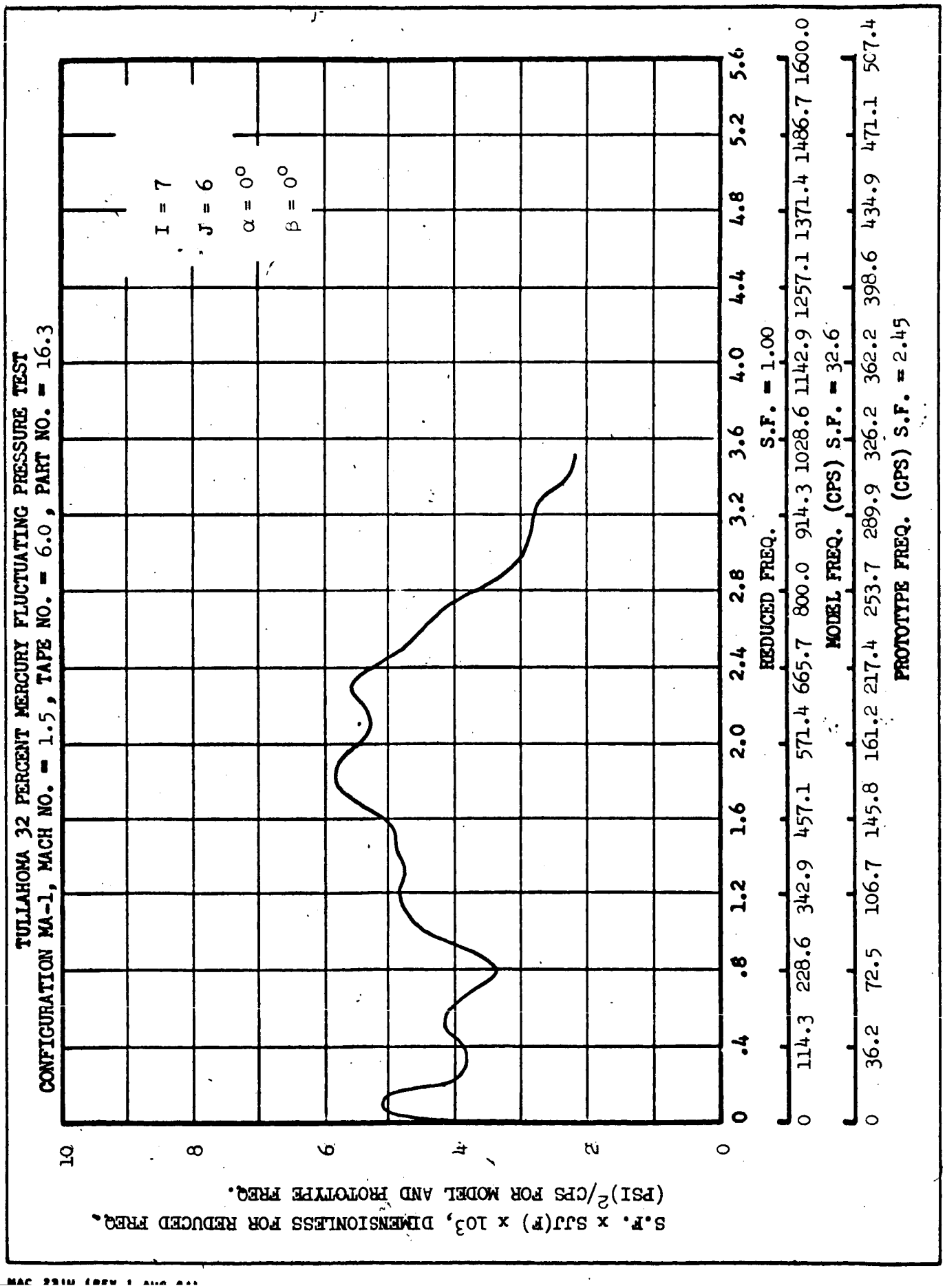

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2 , TAPE NO. = 5.0 , PART NO. = 13.3
I = 9
J = 6
α = 0°
β = 0°
S.F. x SII(F) x 10⁴, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
REDUCED FREQ. S.F. = 1.00
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
MODEL FREQ. (CPS) S.F. = 8.59
0 93.2 186.5 279.7 373.0 466.2 559.4 652.7 745.9 839.2 932.4 1025.6 1116.9 1212.1 1305.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45
0 29.1 58.2 87.3 116.4 145.5 174.6 203.7 232.8 261.9 291.0 320.1 349.2 378.8 407.4

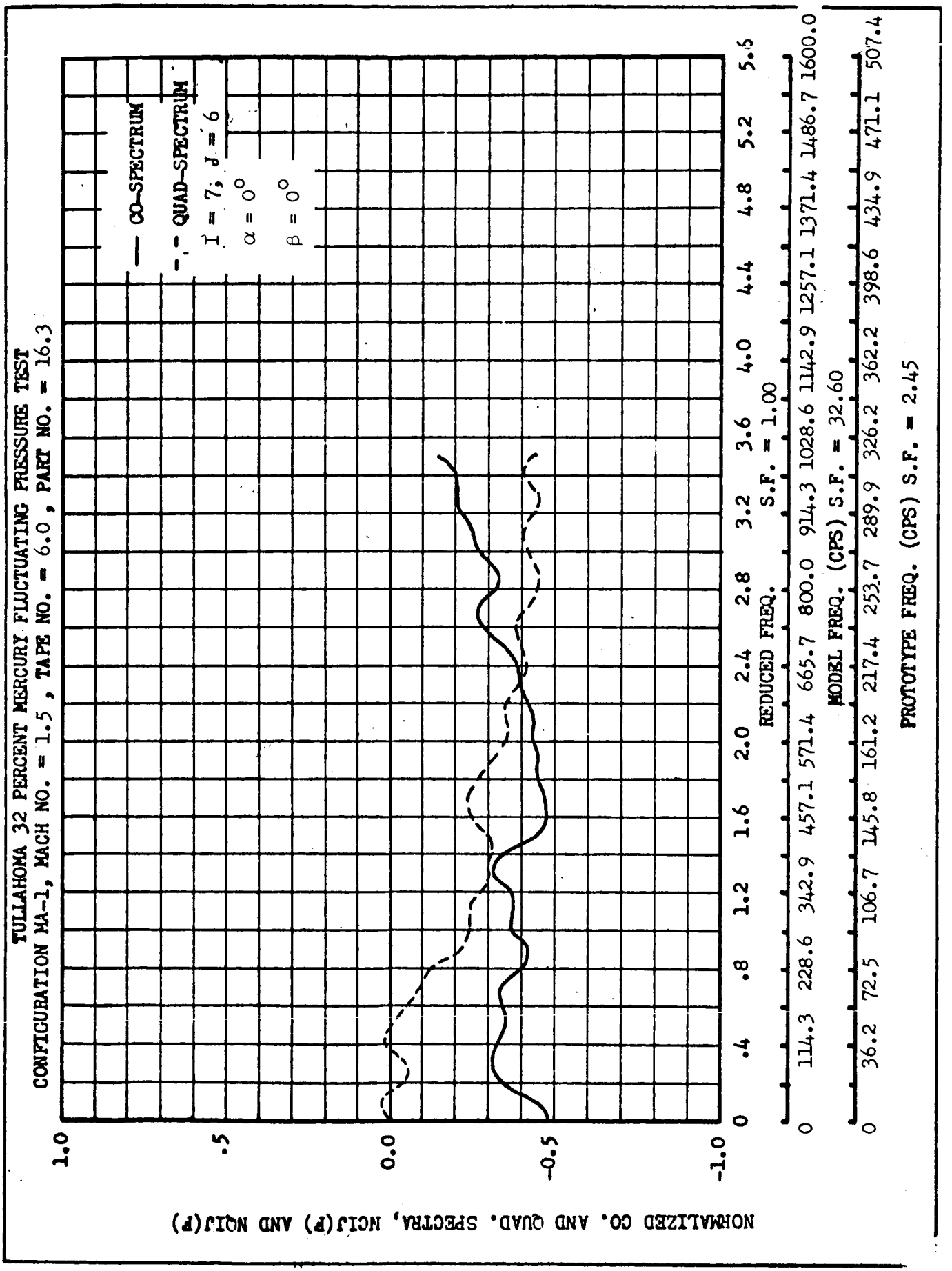

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2, TAPE NO. = 5.0, PART NO. = 13.3
I = 9
J = 6
α = 0°
β = 0°
S.F. x SJJ(F) x 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
REDUCED FREQ.
S.F. = 1.00
MODEL FREQ. (CPS) S.F. = 8.59
PROTOTYPE FREQ. (CPS) S.F. = 2.45
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
0 93.2 186.5 279.7 373.0 466.2 559.4 652.7 745.9 839.2 932.4 1025.6 1116.9 1212.1 1305.4
0 29.1 58.2 87.3 116.4 145.5 174.6 203.7 232.8 261.9 291.0 320.1 349.2 378.8 407.4
0 2 4 6 8 10

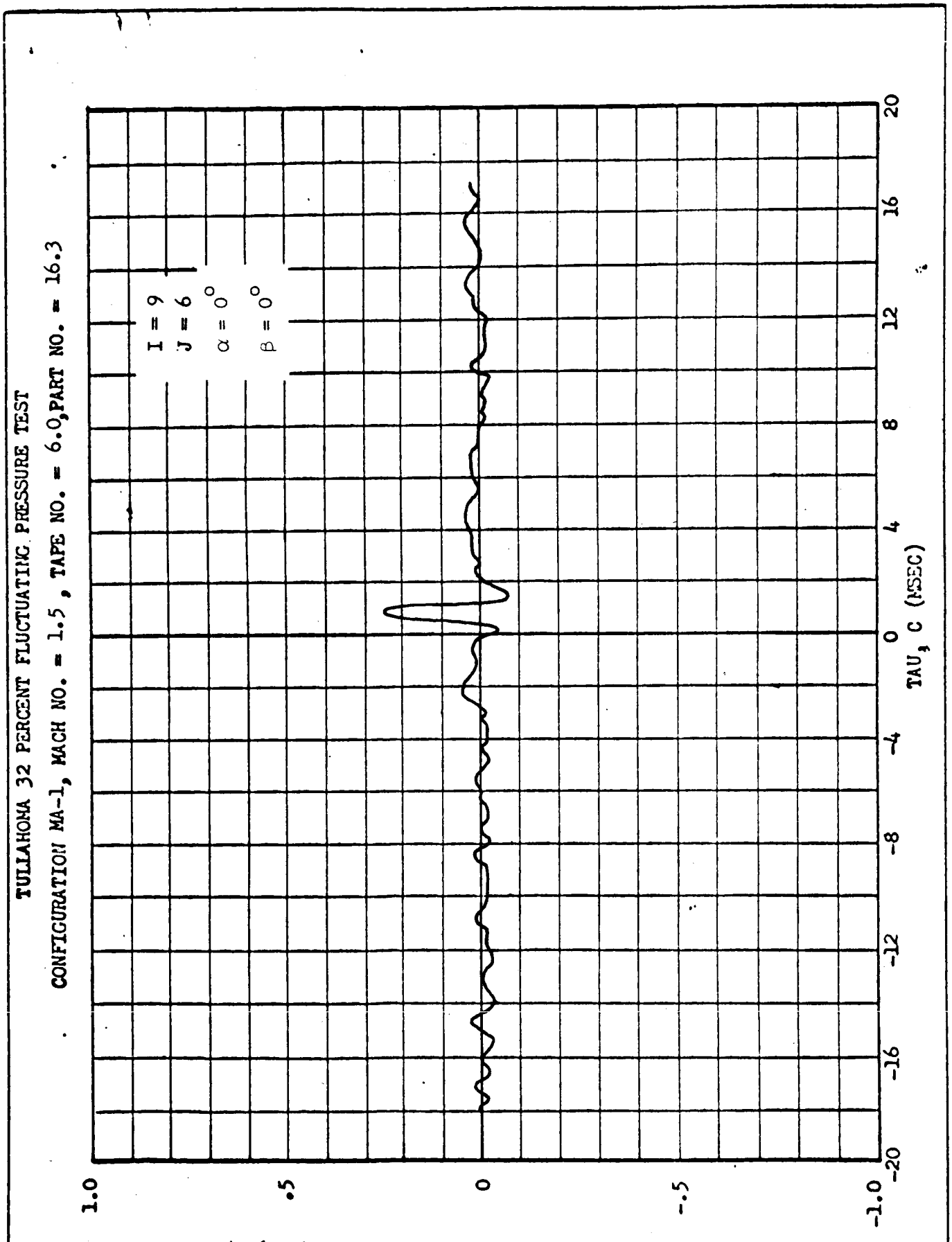

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2, TAPE NO. = 5.0, PART NO. = 13.3
— CO-SPECTRUM
- - QUAD-SPECTRUM
I = 9, J = 6
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA, NCIJ(F) AND NQIJ(F)
1.0
.5
0.0
-0.5
-1.0
0
.4
.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
REDUCED FREQ.
S.F. = 1.00
0
93.2
186.5
279.7
373.0
466.2
559.4
652.7
745.9
839.2
932.4
1025.6
1116.9
1212.1
1305.4
MODEL FREQ. (CPS) S.F. = 8.59
0
29.1
58.2
87.3
116.4
145.5
174.6
203.7
232.8
261.9
291.0
320.1
349.2
378.8
407.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45


TULIAHONA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1 , MACH NO. = 1.5 , TAPE NO. = 6.0 , PART NO. = 16.3
I = 7
J = 6
α = 0°
β = 0°
TAU, C (MSEC)
20
16
12
8
4
0
-4
-8
-12
-16
-20
1.0
.5
0
-.5
-1.0
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)

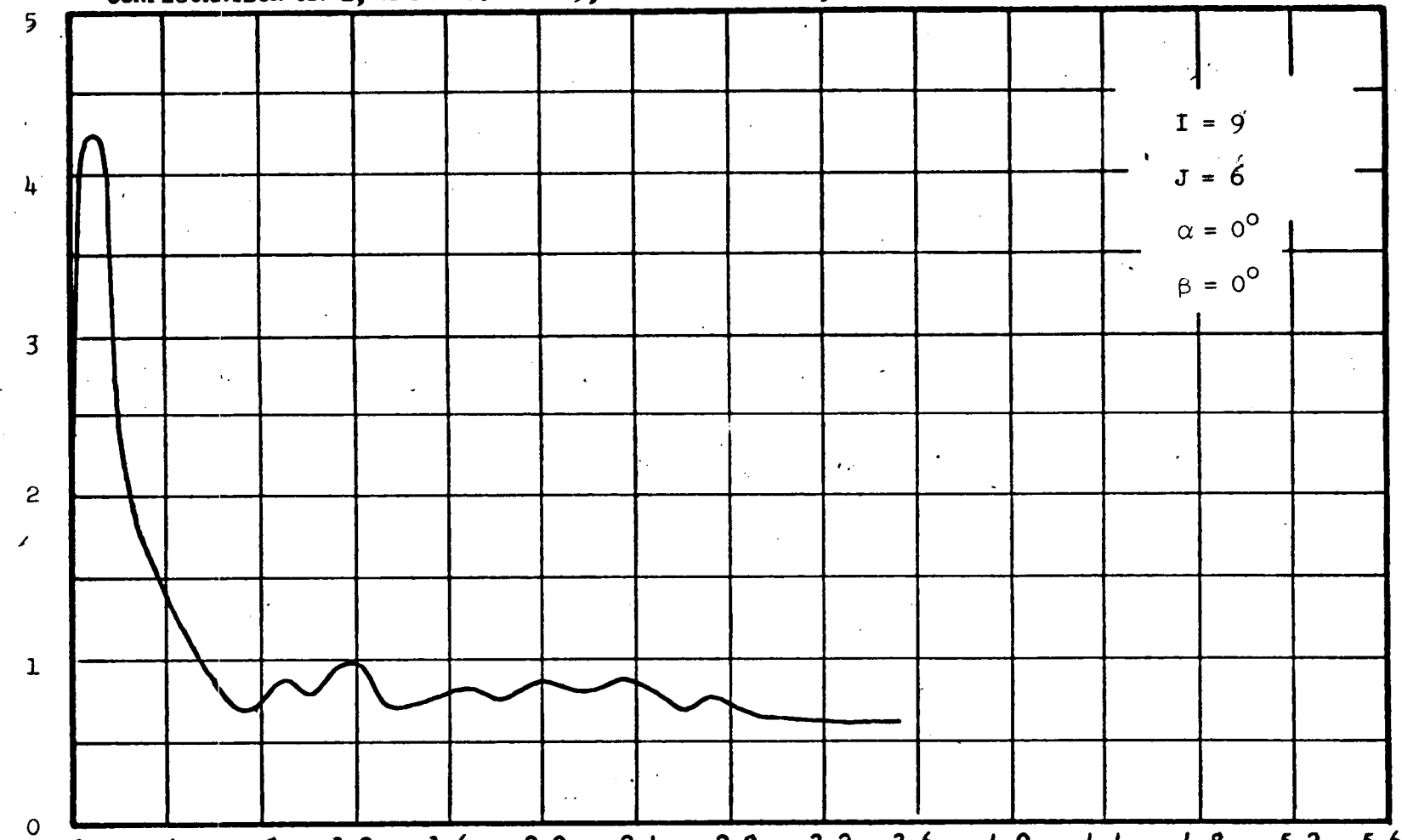

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.5, TAPE NO. = 6.0, PART NO. = 16.3
I = 7
J = 6
α = 0°
β = 0°
S.F. = 1.00
REDUCED FREQ.
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
0 114.3 228.6 342.9 457.1 571.4 665.7 800.0 914.3 1028.6 1142.9 1257.1 1371.4 1486.1 1600.0
MODEL FREQ. (CPS) S.F. = 32.6
0 36.2 72.5 106.7 145.8 161.2 217.4 253.7 289.9 326.2 362.2 398.6 434.9 471.1 507.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45
0 1 2 3 4 5
S.F. x SII(F) x 10⁴, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.5, TAPE NO. = 6.0, PART NO. = 16.3
I = 7
J = 6
α = 0°
β = 0°
S.F. x SJJ(F) x 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
REDUCED FREQ. S.F. = 1.00
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
MODEL FREQ. (CPS) S.F. = 32.6
0 114.3 228.6 342.9 457.1 571.4 665.7 800.0 914.3 1028.6 1142.9 1257.1 1371.4 1486.7 1600.0
PROTOTYPE FREQ. (CPS) S.F. = 2.45
0 36.2 72.5 106.7 145.8 161.2 217.4 253.7 289.9 326.2 362.2 398.6 434.9 471.1 507.4
10 8 6 4 2 0


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.5 , TAPE NO. = 6.0 , PART NO. = 16.3
— CO-SPECTRUM
- - QUAD-SPECTRUM
I = 7; J = 6
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA, NCIJ(P) AND NQIJ(P)
1.0
.5
0.0
-0.5
-1.0
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ. S.F. = 1.00
0 114.3 228.6 342.9 457.1 571.4 665.7 800.0 914.3 1028.6 1142.9 1257.1 1371.4 1486.7 1600.0
MODEL FREQ. (CPS) S.F. = 32.60
0 36.2 72.5 106.7 145.8 161.2 217.4 253.7 289.9 326.2 362.2 398.6 434.9 471.1 507.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45


TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.5 , TAPE NO. = 6.0, PART NO. = 16.3
I = 9
J = 6
α = 0°
β = 0°
TAU, C (MSEC)
20
16
12
8
4
0
-4
-8
-12
-16
-20
1.0
.5
0
-.5
-1.0
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.5, TAPE NO. = 6.0, PART NO. = 16.3



S.F. x SII(F) x 10^4, DIMENSIONLESS FOR REDUCED FREQ.
$(PSI)^2$/CPS FOR MODEL AND PROTOTYPE FREQ.

0 1 2 3 4 5

0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ. S.F. = 1.00

0 114.3 228.6 342.9 457.1 571.4 665.7 800.0 914.3 1028.6 1142.9 1257.1 1371.4 1486.7 1600.0
MODEL FREQ. (CPS) S.F. = 32.6

0 36.2 72.5 106.7 145.8 161.2 217.4 253.7 289.9 326.2 362.2 398.6 434.9 471.1 507.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45

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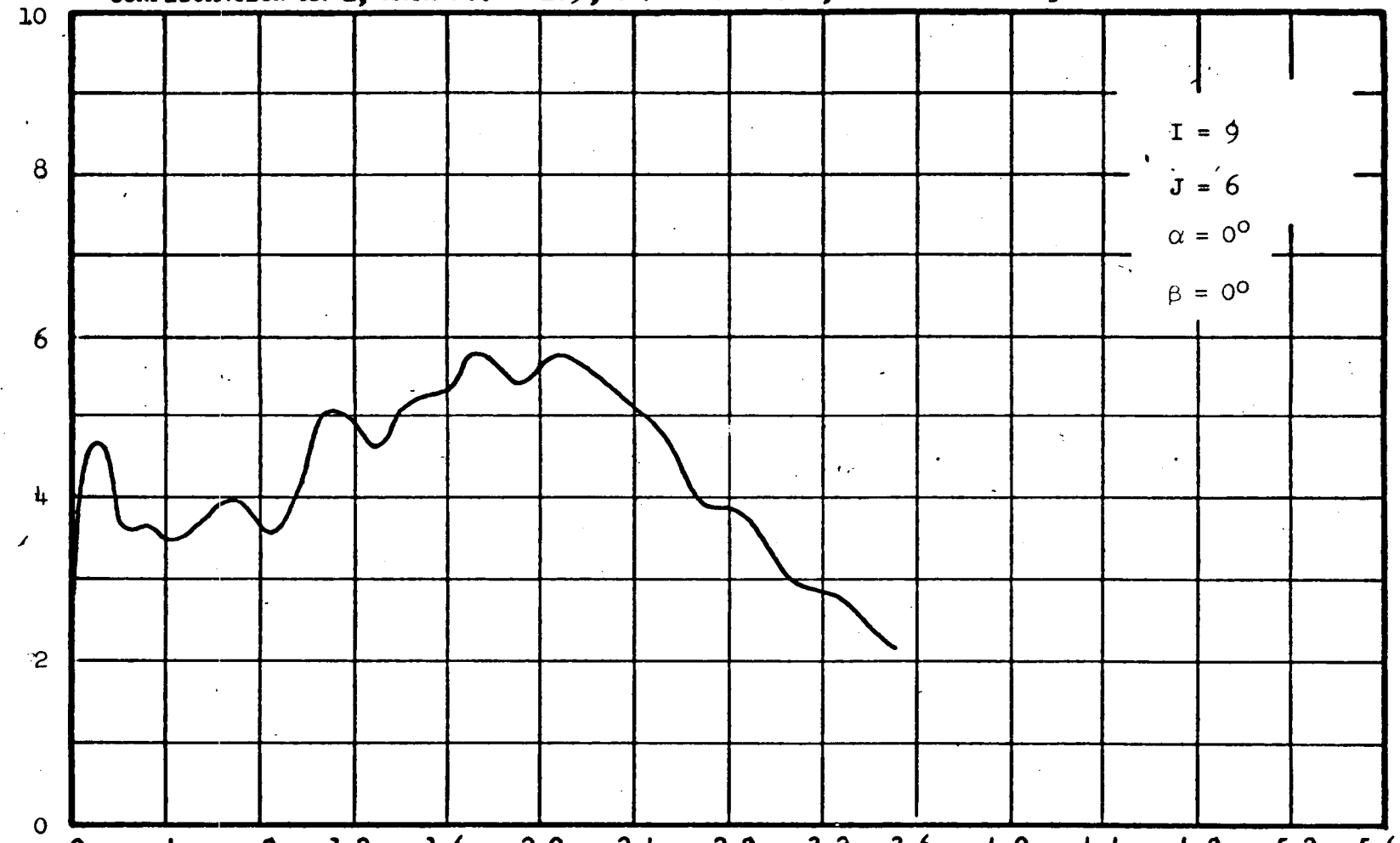
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.5, TAPE NO. = 6.0, PART NO. = 16.3



DATE 30 April 1965
REVISED
REVISED
MCDONNELL
ST. LOUIS, MISSOURI
MODEL
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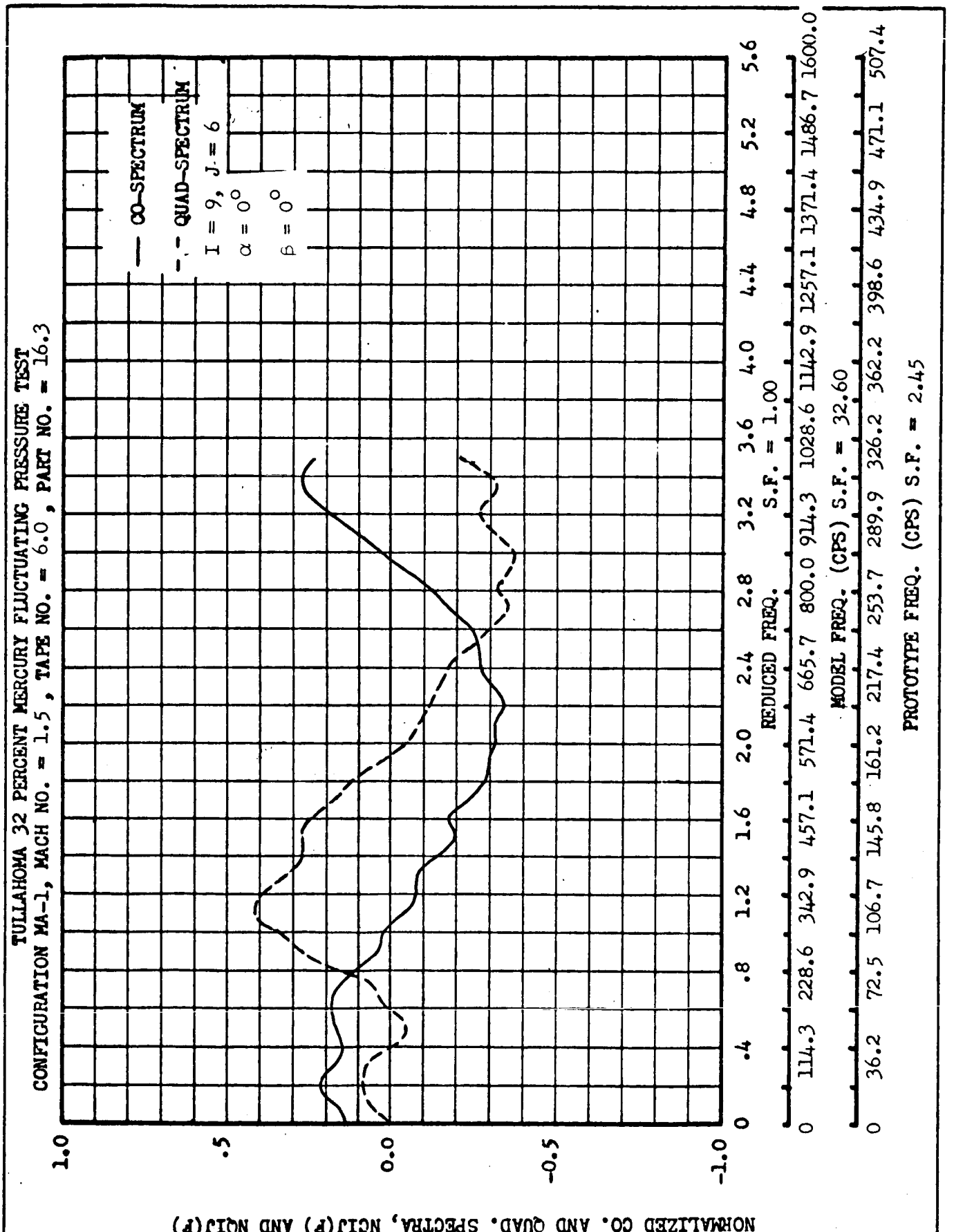

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.5 , TAPE NO. = 6.0 , PART NO. = 16.3
— CO-SPECTRUM
- - - QUAD-SPECTRUM
I = 9, J = 6
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA, NCIJ(P) AND NQIJ(P)
1.0
.5
0.0
-0.5
-1.0
0 .4 .8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6
REDUCED FREQ. S.F. = 1.00
0 114.3 228.6 342.9 457.1 571.4 665.7 800.0 914.3 1028.6 1142.9 1257.1 1371.4 1486.7 1600.0
MODEL FREQ. (CPS) S.F. = 32.60
0 36.2 72.5 106.7 145.8 161.2 217.4 253.7 289.9 326.2 362.2 398.6 434.9 471.1 507.4
PROTOTYPE FREQ. (CPS) S.F. = 2.45

CORRELATION DATA

TULLAHOMA 32-PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$
CONFIG. MA-1

MACH NO.= 1.0 TAPE NO.= 5.C PART NO.=12.3 J= 6 I= 7
RJJ(0)= 8.0008E-01 RII(0)= 5.8820E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	-0.CC	0.03	1.69E 01	0.01	1.81E 01	0.CC
69	1.72E 01	-0.01	0.02	1.67E 01	-0.00	1.78E 01	0.C1
68	1.70E 01	-0.C1	-0.00	1.64E 01	-0.01	1.76E 01	0.C1
67	1.67E 01	0.CC	-0.01	1.62E 01	-0.01	1.73E 01	0.CC
66	1.65E 01	0.02	0.00	1.59E 01	-0.01	1.71E 01	0.CC
65	1.62E 01	0.03	0.01	1.57E 01	-0.01	1.68E 01	0.C1
64	1.60E 01	0.03	0.01	1.54E 01	-0.00	1.66E 01	0.C2
63	1.57E 01	0.01	0.02	1.52E 01	0.00	1.63E 01	0.C1
62	1.55E 01	0.00	0.01	1.49E 01	0.01	1.61E 01	0.00
61	1.52E 01	-0.CC	0.00	1.47E 01	-0.00	1.58E 01	-0.CC
60	1.50E 01	0.00	-0.00	1.44E 01	-0.01	1.56E 01	0.CC
59	1.47E 01	0.C1	-0.00	1.42E 01	-0.02	1.53E 01	0.C1
58	1.45E 01	0.02	-0.01	1.39E 01	-0.02	1.51E 01	0.C1
57	1.42E 01	0.01	-0.00	1.37E 01	-0.02	1.48E 01	0.C2
56	1.40E 01	0.01	0.01	1.34E 01	-0.01	1.46E 01	0.C1
55	1.37E 01	0.01	0.01	1.32E 01	0.CC	1.43E 01	-0.CC
54	1.35E 01	0.01	-0.00	1.29E 01	0.00	1.41E 01	-0.C1
53	1.32E 01	-0.01	-0.00	1.27E 01	-0.00	1.38E 01	-0.C1
52	1.30E 01	-0.C1	-0.00	1.24E 01	-0.CC	1.36E 01	-0.01
51	1.27E 01	-0.01	-0.01	1.22E 01	-0.01	1.33E 01	-0.01
50	1.25E 01	-0.00	-0.01	1.19E 01	-0.01	1.31E 01	-0.CC
49	1.22E 01	0.0C	-0.01	1.17E 01	-0.01	1.28E 01	0.CC
48	1.20E 01	0.01	-0.00	1.14E 01	-0.01	1.26E 01	-0.C1
47	1.17E 01	0.01	-0.00	1.12E 01	-0.01	1.23E 01	-0.C1
46	1.15E 01	0.02	-0.00	1.09E 01	-0.00	1.21E 01	-0.C1
45	1.12E 01	0.02	-0.00	1.07E 01	0.CC	1.18E 01	-0.C1
44	1.10E 01	0.02	-0.01	1.04E 01	0.01	1.16E 01	-0.C1
43	1.07E 01	0.C1	-0.01	1.02E 01	0.01	1.13E 01	-0.C1
42	1.05E 01	0.01	-0.01	9.95E 00	0.01	1.11E 01	-0.C1
41	1.02E 01	0.01	-0.00	9.70E 00	0.00	1.08E 01	0.CC
40	10.00E 00	0.01	0.00	9.45E 00	-0.01	1.06E 01	0.C1
39	9.75E 00	0.0C	0.00	9.20E 00	-0.01	1.03E 01	0.CC
38	9.50E 00	0.CC	0.00	8.95E 00	-0.02	1.01E 01	-0.C1
37	9.25E 00	0.01	0.00	8.70E 00	-0.02	9.80E 00	-0.C1
36	9.00E 00	0.02	0.01	8.45E 00	-0.01	9.55E 00	-0.C1
35	8.75E 00	0.02	0.02	8.20E 00	-0.00	9.30E 00	-0.CC
34	8.50E 00	0.01	0.02	7.95E 00	0.00	9.05E 00	-0.CC

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$ CONFIG. MA-1 MACH NO.= 1.0 TAPE NO.= 5.0 PART NO.=12.3 J= 6 I= 7
RJJ(0)= 8.0008E-01 RII(0)= 5.8820E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 00	-0.00	0.01	7.70E 00	0.01	8.80E 00	-0.00
32	8.00E 00	-0.01	0.01	7.45E 00	-0.00	8.55E 00	-0.00
31	7.75E 00	-0.02	0.00	7.20E 00	-0.01	8.30E 00	-0.00
30	7.50E 00	-0.01	-0.01	6.95E 00	-0.01	8.05E 00	-0.00
29	7.25E 00	-0.01	0.01	6.70E 00	-0.00	7.80E 00	0.01
28	7.00E 00	-0.00	0.03	6.45E 00	-0.00	7.55E 00	0.01
27	6.75E 00	0.00	0.04	6.20E 00	-0.00	7.30E 00	0.01
26	6.50E 00	0.01	0.03	5.95E 00	0.01	7.05E 00	0.01
25	6.25E 00	0.00	0.03	5.70E 00	0.02	6.80E 00	0.01
24	6.00E 00	-0.01	0.03	5.45E 00	0.02	6.55E 00	0.01
23	5.75E 00	-0.01	0.03	5.20E 00	0.01	6.30E 00	0.00
22	5.50E 00	0.00	0.03	4.95E 00	-0.00	6.05E 00	0.01
21	5.25E 00	0.02	0.05	4.70E 00	-0.02	5.80E 00	0.01
20	5.00E 00	0.02	0.06	4.45E 00	-0.02	5.55E 00	0.01
19	4.75E 00	0.02	0.06	4.20E 00	-0.02	5.30E 00	-0.00
18	4.50E 00	0.01	0.07	3.95E 00	-0.01	5.05E 00	-0.01
17	4.25E 00	0.01	0.08	3.70E 00	-0.01	4.80E 00	-0.01
16	4.00E 00	0.01	0.08	3.45E 00	-0.00	4.55E 00	0.01
15	3.75E 00	0.01	0.08	3.20E 00	-0.00	4.30E 00	0.01
14	3.50E 00	0.00	0.08	2.95E 00	-0.01	4.05E 00	0.00
13	3.25E 00	-0.01	0.08	2.70E 00	-0.01	3.80E 00	-0.01
12	3.00E 00	-0.00	0.09	2.45E 00	-0.01	3.55E 00	-0.01
11	2.75E 00	0.02	0.10	2.20E 00	0.01	3.30E 00	-0.00
10	2.50E 00	0.04	0.10	1.95E 00	0.05	3.05E 00	0.01
9	2.25E 00	0.04	0.12	1.70E 00	0.10	2.80E 00	0.02
8	2.00E 00	0.01	0.12	1.45E 00	0.15	2.55E 00	0.02
7	1.75E 00	-0.03	0.12	1.20E 00	0.19	2.30E 00	0.00
6	1.50E 00	-0.07	0.12	9.49E-01	0.17	2.05E 00	-0.01
5	1.25E 00	-0.12	0.09	6.99E-01	-0.01	1.80E 00	0.00
4	10.00E-01	-0.16	0.11	4.49E-01	-0.31	1.55E 00	0.03
3	7.50E-01	-0.12	0.16	1.99E-01	-0.43	1.30E 00	0.04
2	5.00E-01	0.14	0.26	-5.10E-02	-0.27	1.05E 00	0.05
1	2.50E-01	0.67	0.67	-3.01E-01	-0.07	8.01E-01	0.05
0	0.	1.00	1.00	-5.51E-01	0.03	5.51E-01	0.03

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^\circ$, $\beta = 0^\circ$

CONFIG. MA-1 MACH NO.= 1.0 TAPE NO.= 5.0 PART NO.=12.3 J= 6 I= 7
MODEL FREQ., S.F.= 2.98 PROTOTYPE FREQ., S.F.= 2.73 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	0.	1.22E-03	2.84E-03	-0.07	0.	0.07	180.00
28.57	8.62	0.14	2.24E-03	5.14E-03	-0.07	-0.00	0.07	183.51
57.14	17.25	0.28	2.11E-03	3.85E-03	-0.11	0.01	0.11	174.69
85.71	25.87	0.43	2.16E-03	2.65E-03	-0.21	0.07	0.22	161.86
114.29	34.49	0.57	2.10E-03	2.09E-03	-0.26	0.13	0.29	153.83
142.86	43.11	0.71	2.13E-03	1.89E-03	-0.32	0.11	0.34	160.56
171.43	51.74	0.85	2.49E-03	1.81E-03	-0.39	0.10	0.40	165.15
200.00	60.36	0.99	2.84E-03	1.89E-03	-0.47	0.12	0.48	165.90
228.57	68.98	1.13	2.88E-03	1.95E-03	-0.57	0.11	0.58	169.15
257.14	77.61	1.28	2.96E-03	1.86E-03	-0.60	0.05	0.61	175.63
285.71	86.23	1.42	3.09E-03	1.77E-03	-0.60	-0.05	0.60	184.32
314.29	94.85	1.56	3.27E-03	1.76E-03	-0.59	-0.11	0.60	190.10
342.86	103.47	1.70	3.52E-03	1.71E-03	-0.58	-0.15	0.60	194.62
371.43	112.10	1.84	3.55E-03	1.60E-03	-0.57	-0.19	0.60	198.48
400.00	120.72	1.98	3.55E-03	1.59E-03	-0.57	-0.21	0.61	199.85
428.57	129.34	2.13	3.68E-03	1.71E-03	-0.57	-0.24	0.62	203.05
457.14	137.97	2.27	3.53E-03	1.73E-03	-0.54	-0.33	0.63	211.19
485.71	146.59	2.41	3.17E-03	1.59E-03	-0.50	-0.41	0.65	219.12
514.29	155.21	2.55	2.83E-03	1.42E-03	-0.49	-0.44	0.65	221.78
542.86	163.83	2.69	2.67E-03	1.31E-03	-0.45	-0.43	0.62	223.81
571.43	172.46	2.83	2.58E-03	1.33E-03	-0.41	-0.42	0.59	225.33
600.00	181.08	2.98	2.33E-03	1.27E-03	-0.40	-0.40	0.56	225.00
628.57	189.70	3.12	2.01E-03	1.09E-03	-0.38	-0.38	0.54	225.14
657.14	198.33	3.26	1.80E-03	9.55E-04	-0.30	-0.40	0.50	233.11
685.71	206.95	3.40	1.69E-03	9.55E-04	-0.21	-0.46	0.51	245.67
714.29	215.57	3.54	1.60E-03	9.72E-04	-0.16	-0.51	0.53	252.08
742.86	224.19	3.68	1.57E-03	8.92E-04	-0.13	-0.52	0.54	256.00
771.43	232.82	3.83	1.56E-03	8.10E-04	-0.13	-0.51	0.52	256.20
800.00	241.44	3.97	1.50E-03	7.50E-04	-0.16	-0.48	0.51	251.97
828.57	250.06	4.11	1.27E-03	6.89E-04	-0.16	-0.49	0.51	252.18
857.14	258.69	4.25	1.06E-03	6.69E-04	-0.08	-0.52	0.53	261.67
885.71	267.31	4.39	9.71E-04	6.50E-04	-0.01	-0.53	0.53	268.48
914.29	275.93	4.53	8.70E-04	6.05E-04	0.00	-0.49	0.49	270.29
942.86	284.55	4.68	7.89E-04	5.51E-04	-0.02	-0.49	0.49	267.15
971.43	293.18	4.82	7.19E-04	5.44E-04	-0.07	-0.47	0.47	261.75
1000.00	301.80	4.96	5.99E-04	5.73E-04	-0.04	-0.39	0.40	264.18

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$
CONFIG. MA-1

MACH NO.= 1.0 TAPE NO.= 5.0 PART NO.=12.3 J= 6 I= 9
PJJ(0)= 7.7425E-01 RII(0)= 5.5658E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.02	-0.00	1.70E 01	-0.02	1.80E 01	0.02
69	1.72E 01	-0.01	-0.00	1.67E 01	-0.01	1.78E 01	0.01
68	1.70E 01	-0.02	-0.00	1.65E 01	0.01	1.75E 01	0.01
67	1.67E 01	-0.02	0.01	1.62E 01	0.01	1.73E 01	-0.01
66	1.65E 01	0.01	-0.00	1.60E 01	0.01	1.70E 01	-0.02
65	1.62E 01	0.03	-0.01	1.57E 01	-0.00	1.68E 01	-0.02
64	1.60E 01	0.03	-0.01	1.55E 01	-0.01	1.65E 01	-0.01
63	1.57E 01	0.01	-0.00	1.52E 01	-0.00	1.63E 01	-0.00
62	1.55E 01	-0.00	0.01	1.50E 01	0.00	1.60E 01	-0.01
61	1.52E 01	0.00	0.01	1.47E 01	-0.01	1.58E 01	-0.01
60	1.50E 01	0.01	0.01	1.45E 01	-0.02	1.55E 01	-0.00
59	1.47E 01	0.01	0.02	1.42E 01	-0.00	1.53E 01	0.01
58	1.45E 01	0.01	0.01	1.40E 01	0.01	1.50E 01	0.01
57	1.42E 01	0.01	-0.01	1.37E 01	0.01	1.48E 01	0.00
56	1.40E 01	0.01	-0.01	1.35E 01	0.00	1.45E 01	-0.00
55	1.37E 01	0.00	0.01	1.32E 01	-0.01	1.43E 01	-0.00
54	1.35E 01	0.00	0.00	1.30E 01	-0.01	1.40E 01	0.00
53	1.32E 01	-0.00	-0.00	1.27E 01	-0.00	1.38E 01	0.01
52	1.30E 01	0.00	0.01	1.25E 01	0.00	1.35E 01	0.01
51	1.27E 01	0.01	0.01	1.22E 01	0.01	1.33E 01	-0.00
50	1.25E 01	0.01	0.00	1.20E 01	-0.00	1.30E 01	-0.01
49	1.22E 01	0.00	0.00	1.17E 01	-0.02	1.28E 01	-0.01
48	1.20E 01	0.00	-0.00	1.15E 01	-0.01	1.25E 01	-0.00
47	1.17E 01	0.01	-0.01	1.12E 01	-0.01	1.23E 01	0.01
46	1.15E 01	0.02	-0.01	1.10E 01	0.00	1.20E 01	0.00
45	1.12E 01	0.02	-0.01	1.07E 01	-0.00	1.18E 01	-0.00
44	1.10E 01	0.01	0.00	1.05E 01	-0.01	1.15E 01	0.01
43	1.07E 01	0.00	0.02	1.02E 01	-0.01	1.13E 01	0.03
42	1.05E 01	-0.00	0.01	9.96E 00	-0.00	1.10E 01	0.03
41	1.02E 01	-0.00	0.00	9.71E 00	-0.00	1.08E 01	0.01
40	10.00E 00	0.00	0.01	9.46E 00	-0.00	1.05E 01	0.00
39	9.75E 00	0.01	0.01	9.21E 00	0.00	1.03E 01	0.01
38	9.50E 00	0.01	0.00	8.96E 00	0.00	1.00E 01	-0.00
37	9.25E 00	0.01	-0.00	8.71E 00	-0.01	9.79E 00	-0.02
36	9.00E 00	0.01	-0.00	8.46E 00	-0.00	9.54E 00	-0.02
35	8.75E 00	0.03	0.00	8.21E 00	0.01	9.29E 00	-0.02
34	8.50E 00	0.03	0.01	7.96E 00	0.01	9.04E 00	-0.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$
CONFIG. MA-1

MACH NO.= 1.0 TAPE NO.= 5.0 PART NO.=12.3 J= 6 I= 5
RJJ(0)= 7.7425E-01 RII(0)= 5.5658E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 00	0.01	0.00	7.71E 00	0.01	8.79E 00	-0.01
32	8.00E 00	-0.00	-0.00	7.46E 00	0.01	8.54E 00	-0.02
31	7.75E 00	-0.01	0.01	7.21E 00	-0.00	8.29E 00	-0.01
30	7.50E 00	-0.00	0.03	6.96E 00	-0.02	8.04E 00	0.00
29	7.25E 00	0.00	0.02	6.71E 00	-0.02	7.79E 00	0.01
28	7.00E 00	0.01	-0.00	6.46E 00	-0.00	7.54E 00	0.01
27	6.75E 00	0.02	-0.01	6.21E 00	0.01	7.29E 00	0.01
26	6.50E 00	0.03	0.01	5.96E 00	0.02	7.04E 00	0.00
25	6.25E 00	0.02	0.01	5.71E 00	0.02	6.79E 00	-0.00
24	6.00E 00	-0.00	0.01	5.46E 00	0.01	6.54E 00	0.00
23	5.75E 00	-0.02	0.00	5.21E 00	-0.01	6.29E 00	0.00
22	5.50E 00	-0.02	0.01	4.96E 00	-0.02	6.04E 00	-0.01
21	5.25E 00	0.00	0.02	4.71E 00	-0.03	5.79E 00	-0.01
20	5.00E 00	0.02	0.01	4.46E 00	-0.02	5.54E 00	0.00
19	4.75E 00	0.03	0.01	4.21E 00	-0.00	5.29E 00	0.01
18	4.50E 00	0.03	0.01	3.96E 00	0.01	5.04E 00	0.01
17	4.25E 00	0.02	0.01	3.71E 00	0.02	4.79E 00	-0.00
16	4.00E 00	0.02	0.01	3.46E 00	0.04	4.54E 00	-0.02
15	3.75E 00	0.00	0.00	3.21E 00	0.06	4.29E 00	-0.03
14	3.50E 00	-0.02	-0.01	2.96E 00	0.06	4.04E 00	-0.01
13	3.25E 00	-0.03	-0.01	2.71E 00	0.02	3.79E 00	0.01
12	3.00E 00	-0.01	0.02	2.46E 00	-0.07	3.54E 00	0.02
11	2.75E 00	0.02	0.03	2.21E 00	-0.16	3.29E 00	0.02
10	2.50E 00	0.05	0.04	1.96E 00	-0.17	3.04E 00	0.02
9	2.25E 00	0.05	0.04	1.71E 00	-0.08	2.79E 00	0.01
8	2.00E 00	0.03	0.03	1.46E 00	0.06	2.54E 00	-0.00
7	1.75E 00	-0.01	0.04	1.21E 00	0.11	2.29E 00	-0.02
6	1.50E 00	-0.06	0.03	9.59E-01	0.06	2.04E 00	-0.03
5	1.25E 00	-0.13	-0.01	7.09E-01	0.01	1.79E 00	-0.02
4	10.00E-01	-0.17	-0.02	4.59E-01	-0.02	1.54E 00	-0.00
3	7.50E-01	-0.12	-0.05	2.09E-01	-0.03	1.29E 00	0.02
2	5.00E-01	0.14	0.00	-4.10E-02	-0.03	1.04E 00	0.02
1	2.50E-01	0.68	0.55	-2.91E-01	-0.01	7.91E-01	0.01
0	0.	1.00	1.00	-5.41E-01	0.00	5.41E-01	0.00

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$

CONFIG. MA-1 MACH NO.= 1.0 TAPE NO.= 5.C PART NO.=12.3 J= 6 I= 9
MODEL FREQ., S.F.= 2.98 PROTOTYPE FREQ., S.F.= 2.73 REDUCED FREQ., S.F.=1.CC

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MCD. COHER.	CF PHASE OF COHER.
C.	0.	C.	1.31E-03	1.09E-03	-0.06	0.	0.06	180.00
28.57	8.62	0.14	2.30E-03	2.00E-03	-0.05	-0.01	0.05	192.67
57.14	17.25	0.28	1.98E-03	1.74E-03	-0.04	-0.02	0.04	209.14
85.71	25.87	0.43	2.04E-03	1.62E-03	-0.03	-0.07	0.07	244.25
114.29	34.49	0.57	2.16E-03	1.60E-03	-0.02	-0.08	0.08	256.80
142.86	43.11	0.71	2.24E-03	1.56E-03	0.03	-0.05	0.06	302.13
171.43	51.74	0.85	2.35E-03	1.47E-03	0.07	-0.07	0.10	312.77
200.00	60.36	0.99	2.54E-03	1.40E-03	0.07	-0.08	0.11	310.29
228.57	68.98	1.13	2.72E-03	1.37E-03	0.12	0.02	0.12	9.61
257.14	77.61	1.28	2.82E-03	1.39E-03	0.21	0.09	0.23	24.09
285.71	86.23	1.42	2.85E-03	1.46E-03	0.20	0.09	0.22	23.78
314.29	94.85	1.56	2.99E-03	1.49E-03	0.11	0.16	0.19	54.62
342.86	103.47	1.70	3.18E-03	1.56E-03	0.03	0.23	0.23	81.44
371.43	112.10	1.84	3.27E-03	1.76E-03	-0.07	0.21	0.22	108.79
400.00	120.72	1.98	3.51E-03	1.86E-03	-0.22	0.15	0.27	145.91
428.57	129.34	2.13	3.88E-03	1.76E-03	-0.34	0.07	0.34	168.59
457.14	137.97	2.27	3.90E-03	1.72E-03	-0.37	-0.03	0.38	184.46
485.71	146.59	2.41	3.43E-03	1.70E-03	-0.35	-0.09	0.36	194.50
514.29	155.21	2.55	2.85E-03	1.65E-03	-0.27	-0.11	0.30	202.11
542.86	163.83	2.69	2.51E-03	1.61E-03	-0.20	-0.15	0.25	216.45
571.43	172.46	2.83	2.39E-03	1.49E-03	-0.14	-0.21	0.25	235.67
600.00	181.08	2.98	2.29E-03	1.39E-03	-0.06	-0.28	0.28	256.95
628.57	189.70	3.12	2.05E-03	1.40E-03	0.06	-0.30	0.31	280.97
657.14	198.33	3.26	1.75E-03	1.46E-03	0.15	-0.25	0.29	301.07
685.71	206.95	3.40	1.62E-03	1.41E-03	0.16	-0.15	0.22	317.45
714.29	215.57	3.54	1.54E-03	1.32E-03	0.20	-0.05	0.21	347.27
742.86	224.19	3.68	1.45E-03	1.27E-03	0.24	0.04	0.24	8.33
771.43	232.82	3.83	1.44E-03	1.23E-03	0.24	0.08	0.25	17.77
800.00	241.44	3.97	1.41E-03	1.21E-03	0.23	0.06	0.24	14.62
828.57	250.06	4.11	1.20E-03	1.10E-03	0.11	0.06	0.13	28.95
857.14	258.69	4.25	9.51E-04	8.92E-04	0.01	0.11	0.11	87.09
885.71	267.31	4.39	8.07E-04	7.90E-04	0.01	0.10	0.10	82.60
914.29	275.93	4.53	7.65E-04	8.60E-04	-0.02	0.05	0.06	108.91
942.86	284.55	4.68	7.42E-04	9.17E-04	-0.05	0.09	0.10	120.33
971.43	293.18	4.82	6.35E-04	8.36E-04	-0.02	0.10	0.10	99.45
1000.00	301.80	4.96	5.37E-04	7.48E-04	-0.05	0.04	0.06	138.93

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$ MACH NO.= 1.0 TAPE NO.= 5.0 PART NO.=12.3 J= 8 I= 9
CONFIG. MA-1 RJJ(0)= 5.4974E-01 RII(0)= 5.5938E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	-0.01	0.01	1.70E 01	0.01	1.80E 01	0.02
69	1.72E 01	0.00	0.01	1.67E 01	0.01	1.78E 01	0.02
68	1.70E 01	0.00	0.01	1.65E 01	0.01	1.75E 01	0.01
67	1.67E 01	-0.01	0.02	1.62E 01	0.01	1.73E 01	-0.00
66	1.65E 01	-0.02	0.01	1.60E 01	0.00	1.70E 01	-0.01
65	1.62E 01	-0.01	-0.02	1.57E 01	-0.01	1.68E 01	-0.01
64	1.60E 01	-0.01	-0.02	1.55E 01	-0.01	1.65E 01	0.00
63	1.57E 01	0.00	-0.01	1.52E 01	-0.01	1.63E 01	0.01
62	1.55E 01	0.01	-0.00	1.50E 01	-0.01	1.60E 01	0.02
61	1.52E 01	-0.00	0.01	1.47E 01	-0.01	1.58E 01	0.02
60	1.50E 01	-0.01	0.00	1.45E 01	0.00	1.55E 01	-0.00
59	1.47E 01	-0.01	0.01	1.42E 01	0.01	1.53E 01	-0.01
58	1.45E 01	-0.02	0.01	1.40E 01	-0.01	1.50E 01	-0.01
57	1.42E 01	-0.01	0.00	1.37E 01	-0.01	1.48E 01	-0.00
56	1.40E 01	-0.00	0.00	1.35E 01	-0.01	1.45E 01	-0.00
55	1.37E 01	0.01	0.02	1.32E 01	-0.01	1.43E 01	-0.01
54	1.35E 01	0.01	0.01	1.30E 01	-0.00	1.40E 01	-0.00
53	1.32E 01	0.01	-0.01	1.27E 01	-0.01	1.38E 01	0.01
52	1.30E 01	-0.00	-0.00	1.25E 01	-0.01	1.35E 01	0.01
51	1.27E 01	-0.01	0.01	1.22E 01	-0.00	1.33E 01	-0.01
50	1.25E 01	-0.01	0.01	1.20E 01	0.00	1.30E 01	-0.00
49	1.22E 01	-0.01	0.00	1.17E 01	0.00	1.28E 01	0.01
48	1.20E 01	0.01	-0.01	1.15E 01	0.00	1.25E 01	0.02
47	1.17E 01	0.01	-0.01	1.12E 01	-0.00	1.23E 01	0.02
46	1.15E 01	0.01	-0.00	1.10E 01	-0.01	1.20E 01	-0.01
45	1.12E 01	-0.00	0.01	1.07E 01	-0.01	1.18E 01	-0.01
44	1.10E 01	-0.01	0.01	1.05E 01	-0.01	1.15E 01	-0.01
43	1.07E 01	-0.01	0.01	1.02E 01	-0.01	1.13E 01	-0.01
42	1.05E 01	-0.00	-0.00	9.97E 00	-0.00	1.10E 01	-0.00
41	1.02E 01	0.00	0.00	9.72E 00	-0.00	1.08E 01	0.01
40	10.00E 00	0.00	-0.00	9.47E 00	-0.02	1.05E 01	0.01
39	9.75E 00	-0.00	-0.02	9.22E 00	-0.03	1.03E 01	0.00
38	9.50E 00	0.00	-0.03	8.97E 00	-0.01	1.00E 01	-0.01
37	9.25E 00	0.01	-0.01	8.72E 00	0.01	9.78E 00	-0.02
36	9.00E 00	0.01	0.01	8.47E 00	0.02	9.53E 00	-0.01
35	8.75E 00	-0.01	0.01	8.22E 00	0.01	9.28E 00	-0.00
34	8.50E 00	-0.02	0.01	7.97E 00	-0.02	9.03E 00	-0.00

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$
CONFIG. MA-1

MACH NO.= 1.0 TAPE NO.= 5.0 PART NO.=12.3 J= 8 I= 9
RJJ(0)= 5.4974E-01 RII(0)= 5.5938E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E CC	-0.01	0.01	7.72E CO	-0.02	8.78E 00	-0.01
32	8.CCE CC	0.01	-0.01	7.47E 00	0.00	8.53E 00	-0.02
31	7.75E CC	0.01	-0.01	7.22E CC	0.01	8.28E 00	-0.02
30	7.5CE 00	0.01	0.01	6.97E 00	-0.00	8.03E 00	-0.00
29	7.25E 0C	-0.01	0.02	6.72E 00	-0.02	7.78E 00	-0.01
28	7.CCE 0C	-0.02	0.01	6.47E 00	-0.01	7.53E 00	-0.02
27	6.75E CC	-0.01	-0.00	6.22E 00	0.00	7.28E 00	-0.01
26	6.5CE 0C	0.01	-0.00	5.97E 00	0.01	7.03E 00	-0.00
25	6.25E 0C	0.01	-0.01	5.72E 00	-0.00	6.78E 00	-0.01
24	6.CCE CC	-0.00	-0.01	5.47E 00	-0.01	6.53E 00	-0.01
23	5.75E 0C	-0.01	0.01	5.22E 00	-0.00	6.28E 00	-0.01
22	5.5CE CC	0.00	0.02	4.97E 00	0.01	6.03E 00	-0.00
21	5.25E CC	0.01	0.02	4.72E 00	0.01	5.78E 00	0.01
20	5.CCE 00	0.02	0.00	4.47E 00	0.01	5.53E 00	0.01
19	4.75E CC	0.00	-0.02	4.22E 00	0.01	5.28E 00	0.00
18	4.5CE CC	-0.02	-0.02	3.97E 00	0.01	5.03E 00	-0.01
17	4.25E CC	-0.02	-0.01	3.72E 00	0.02	4.78E 00	-0.01
16	4.CCE CC	-0.01	0.00	3.47E 00	0.02	4.53E 00	0.00
15	3.75E CC	-0.00	0.00	3.22E 00	0.01	4.28E 00	0.01
14	3.50E CO	-0.02	0.01	2.97E 00	-0.01	4.03E 00	0.01
13	3.25E CC	-0.02	0.02	2.72E 00	0.00	3.78E 00	0.01
12	3.CCE CC	-0.01	0.03	2.47E 00	0.03	3.53E CO	0.00
11	2.75E CC	-0.02	0.03	2.22E 00	0.02	3.28E 00	-0.00
10	2.5CE CC	-0.01	0.04	1.97E 00	0.01	3.03E 00	0.00
9	2.25E CC	0.01	0.03	1.72E 00	0.03	2.78E 00	-0.01
8	2.CCE 0C	0.01	0.03	1.47E 00	0.08	2.53E 00	-0.02
7	1.75E 00	0.00	0.05	1.22E 00	0.16	2.28E 00	-0.03
6	1.5CE CC	0.01	0.05	9.68E-01	0.24	2.03E 00	-0.03
5	1.25E 00	0.02	-0.00	7.18E-01	0.18	1.78E 00	-0.03
4	10.CCE-01	0.05	-0.03	4.68E-01	-0.02	1.53E 00	-0.01
3	7.50E-01	-0.03	-0.05	2.18E-01	-0.14	1.28E 00	-0.01
2	5.COE-01	-0.05	C.CO	-3.20E-02	-0.09	1.03E 00	-0.01
1	2.50E-01	0.51	0.55	-2.82E-01	-0.02	7.82E-01	-0.00
0	0.	1.00	1.00	-5.32E-01	0.00	5.32E-01	0.00

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$

CONFIG. MA-1 MACH NO.= 1.0 TAPE NO.= 5.0 PART NO.=12.3 J= 8 I= 9
MODEL FREQ., S.F.= 2.98 PROTOTYPE FREQ., S.F.= 2.73 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MOD. CF COHER.	PHASE OF COHER.
0.	0.	0.	7.70E-04	1.03E-03	0.13	-0.	0.13	360.00
28.57	8.62	0.14	1.59E-03	2.02E-03	0.17	0.12	0.21	34.74
57.14	17.25	0.28	1.64E-03	1.93E-03	0.19	0.21	0.28	46.68
85.71	25.87	0.43	1.68E-03	1.77E-03	0.10	0.24	0.26	66.78
114.29	34.49	0.57	1.71E-03	1.62E-03	0.01	0.30	0.30	88.19
142.86	43.11	0.71	1.72E-03	1.52E-03	-0.00	0.36	0.36	90.16
171.43	51.74	0.85	1.70E-03	1.39E-03	0.01	0.37	0.37	88.17
200.00	60.36	0.99	1.59E-03	1.28E-03	-0.01	0.35	0.35	92.25
228.57	68.98	1.13	1.46E-03	1.28E-03	-0.05	0.33	0.33	97.97
257.14	77.61	1.28	1.35E-03	1.39E-03	-0.11	0.31	0.33	109.64
285.71	86.23	1.42	1.32E-03	1.47E-03	-0.21	0.28	0.35	125.90
314.29	94.85	1.56	1.34E-03	1.54E-03	-0.27	0.19	0.33	144.44
342.86	103.47	1.70	1.37E-03	1.72E-03	-0.31	0.13	0.33	157.51
371.43	112.10	1.84	1.42E-03	1.79E-03	-0.34	0.09	0.35	164.59
400.00	120.72	1.98	1.43E-03	1.68E-03	-0.40	0.05	0.40	173.31
428.57	129.34	2.13	1.41E-03	1.61E-03	-0.43	0.02	0.43	177.02
457.14	137.97	2.27	1.33E-03	1.61E-03	-0.41	0.00	0.41	179.70
485.71	146.59	2.41	1.34E-03	1.56E-03	-0.37	-0.03	0.37	184.47
514.29	155.21	2.55	1.44E-03	1.58E-03	-0.36	-0.04	0.36	186.93
542.86	163.83	2.69	1.38E-03	1.76E-03	-0.31	-0.09	0.32	195.77
571.43	172.46	2.83	1.33E-03	1.79E-03	-0.27	-0.17	0.32	211.97
600.00	181.08	2.98	1.38E-03	1.57E-03	-0.30	-0.17	0.35	210.23
628.57	189.70	3.12	1.37E-03	1.38E-03	-0.29	-0.16	0.33	208.93
657.14	198.33	3.26	1.32E-03	1.38E-03	-0.22	-0.23	0.32	225.87
685.71	206.95	3.40	1.16E-03	1.47E-03	-0.16	-0.25	0.30	237.72
714.29	215.57	3.54	1.08E-03	1.49E-03	-0.14	-0.22	0.26	238.47
742.86	224.19	3.68	1.26E-03	1.35E-03	-0.14	-0.27	0.31	243.25
771.43	232.82	3.83	1.43E-03	1.25E-03	-0.12	-0.35	0.37	251.81
800.00	241.44	3.97	1.36E-03	1.19E-03	-0.04	-0.35	0.35	262.73
828.57	250.06	4.11	1.20E-03	1.02E-03	0.01	-0.26	0.26	272.76
857.14	258.69	4.25	1.13E-03	8.93E-04	0.03	-0.16	0.16	280.03
885.71	267.31	4.39	1.13E-03	8.75E-04	0.00	-0.21	0.21	270.24
914.29	275.93	4.53	1.12E-03	8.57E-04	-0.03	-0.22	0.22	261.81
942.86	284.55	4.68	1.09E-03	8.51E-04	-0.00	-0.15	0.15	269.27
971.43	293.18	4.82	1.06E-03	8.21E-04	0.02	-0.14	0.14	279.72
1000.00	301.80	4.96	1.01E-03	7.29E-04	0.03	-0.15	0.16	279.47

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$
CONFIG. MA-1

MACH NO.= 1.2 TAPE NO.= 5.0 PART NO.=13.3 J= 6 I= 7
RJJ(0)= 4.2408E-01 RII(0)= 1.4455E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.01	0.02	1.69E 01	-0.01	1.81E 01	-0.02
69	1.72E 01	0.02	0.03	1.67E 01	0.01	1.78E 01	-0.02
68	1.70E 01	0.02	0.03	1.64E 01	0.01	1.76E 01	-0.01
67	1.67E 01	0.00	0.03	1.62E 01	0.00	1.73E 01	-0.01
66	1.65E 01	-0.01	0.02	1.59E 01	-0.01	1.71E 01	-0.01
65	1.62E 01	-0.01	0.00	1.57E 01	-0.02	1.68E 01	-0.01
64	1.60E 01	-0.01	-0.00	1.54E 01	-0.02	1.66E 01	-0.00
63	1.57E 01	-0.01	0.01	1.52E 01	-0.00	1.63E 01	0.01
62	1.55E 01	-0.00	0.02	1.49E 01	0.01	1.61E 01	0.01
61	1.52E 01	0.00	0.03	1.47E 01	0.00	1.58E 01	0.00
60	1.50E 01	0.00	0.02	1.44E 01	-0.00	1.56E 01	0.01
59	1.47E 01	0.00	0.01	1.42E 01	0.00	1.53E 01	0.01
58	1.45E 01	0.01	0.01	1.39E 01	0.01	1.51E 01	-0.01
57	1.42E 01	0.01	0.01	1.37E 01	0.00	1.48E 01	-0.02
56	1.40E 01	-0.00	0.00	1.34E 01	-0.00	1.46E 01	-0.02
55	1.37E 01	-0.01	-0.00	1.32E 01	0.00	1.43E 01	-0.01
54	1.35E 01	-0.02	-0.01	1.29E 01	0.01	1.41E 01	-0.02
53	1.32E 01	-0.01	-0.01	1.27E 01	0.00	1.38E 01	-0.01
52	1.30E 01	-0.00	-0.00	1.24E 01	-0.01	1.36E 01	0.01
51	1.27E 01	0.00	-0.00	1.22E 01	-0.03	1.33E 01	0.02
50	1.25E 01	0.01	-0.00	1.19E 01	-0.02	1.31E 01	0.03
49	1.22E 01	0.01	0.02	1.17E 01	-0.01	1.28E 01	0.01
48	1.20E 01	0.01	0.02	1.14E 01	-0.01	1.26E 01	-0.00
47	1.17E 01	0.00	0.01	1.12E 01	-0.01	1.23E 01	-0.01
46	1.15E 01	0.00	-0.00	1.09E 01	-0.00	1.21E 01	-0.02
45	1.12E 01	0.01	-0.01	1.07E 01	0.00	1.18E 01	-0.01
44	1.10E 01	0.02	-0.00	1.04E 01	-0.01	1.16E 01	-0.00
43	1.07E 01	0.02	0.01	1.02E 01	-0.01	1.13E 01	0.01
42	1.05E 01	0.01	0.02	9.95E 00	-0.01	1.11E 01	0.01
41	1.02E 01	0.01	0.02	9.70E 00	-0.00	1.08E 01	0.01
40	10.00E 00	0.00	0.02	9.45E 00	-0.01	1.06E 01	-0.01
39	9.75E 00	-0.00	0.00	9.20E 00	-0.02	1.03E 01	-0.02
38	9.50E 00	-0.01	-0.01	8.95E 00	-0.02	1.01E 01	-0.02
37	9.25E 00	-0.01	-0.00	8.70E 00	-0.02	9.80E 00	-0.02
36	9.00E 00	-0.00	0.01	8.45E 00	-0.01	9.55E 00	-0.01
35	8.75E 00	0.01	0.01	8.20E 00	0.00	9.30E 00	0.01
34	8.50E 00	0.01	0.01	7.95E 00	0.01	9.05E 00	0.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$
CONFIG. MA-1

MACH NO.= 1.2 TAPE NO.= 5.0 PART NO.=13.3 J= 6 I= 7
RJJ(0)= 4.2408E-01 RII(0)= 1.4455E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 00	0.02	0.01	7.70E 00	0.01	8.80E 00	0.00
32	8.00E 00	0.02	0.02	7.45E 00	-0.00	8.55E 00	-0.00
31	7.75E 00	0.01	0.02	7.20E 00	-0.02	8.30E 00	-0.00
30	7.50E 00	0.00	0.02	6.95E 00	-0.04	8.05E 00	0.00
29	7.25E 00	-0.01	0.02	6.70E 00	-0.03	7.80E 00	-0.00
28	7.00E 00	-0.01	0.03	6.45E 00	-0.02	7.55E 00	-0.01
27	6.75E 00	0.01	0.03	6.20E 00	-0.01	7.30E 00	-0.02
26	6.50E 00	0.02	0.02	5.95E 00	0.00	7.05E 00	-0.01
25	6.25E 00	0.03	0.00	5.70E 00	0.01	6.80E 00	-0.01
24	6.00E 00	0.02	-0.00	5.45E 00	-0.00	6.55E 00	-0.00
23	5.75E 00	0.01	0.00	5.20E 00	-0.01	6.30E 00	-0.01
22	5.50E 00	0.01	0.01	4.95E 00	-0.01	6.05E 00	-0.01
21	5.25E 00	0.00	0.01	4.70E 00	-0.01	5.80E 00	-0.01
20	5.00E 00	-0.00	0.01	4.45E 00	-0.02	5.55E 00	-0.01
19	4.75E 00	-0.00	0.01	4.20E 00	-0.02	5.30E 00	-0.01
18	4.50E 00	-0.00	0.01	3.95E 00	-0.02	5.05E 00	-0.01
17	4.25E 00	0.01	0.02	3.70E 00	-0.02	4.80E 00	-0.01
16	4.00E 00	0.01	0.03	3.45E 00	-0.01	4.55E 00	-0.02
15	3.75E 00	0.01	0.03	3.20E 00	-0.00	4.30E 00	-0.01
14	3.50E 00	0.01	0.03	2.95E 00	-0.01	4.05E 00	-0.00
13	3.25E 00	0.01	0.02	2.70E 00	-0.02	3.80E 00	-0.01
12	3.00E 00	0.01	0.02	2.45E 00	-0.02	3.55E 00	-0.02
11	2.75E 00	0.01	0.02	2.20E 00	-0.01	3.30E 00	-0.02
10	2.50E 00	0.03	0.02	1.95E 00	-0.00	3.05E 00	-0.02
9	2.25E 00	0.05	0.03	1.70E 00	0.01	2.80E 00	-0.00
8	2.00E 00	0.05	0.02	1.45E 00	0.04	2.55E 00	0.00
7	1.75E 00	0.02	0.02	1.20E 00	0.05	2.30E 00	-0.01
6	1.50E 00	-0.04	0.01	9.49E-01	-0.01	2.05E 00	-0.03
5	1.25E 00	-0.13	-0.02	6.99E-01	-0.20	1.80E 00	-0.04
4	10.00E-01	-0.18	-0.03	4.49E-01	-0.45	1.55E 00	-0.04
3	7.50E-01	-0.14	-0.00	1.99E-01	-0.48	1.30E 00	-0.00
2	5.00E-01	0.11	0.17	-5.10E-02	-0.23	1.05E 00	0.06
1	2.50E-01	0.66	0.66	-3.01E-01	0.04	8.01E-01	0.12
0	0.	1.00	1.00	-5.51E-01	0.14	5.51E-01	0.14

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$
CONFIG. MA-1 MACH NO.= 1.2 TAPE NO.= 5.0 PART NO.=13.3 J= 6 I= 7
MODEL FREQ., S.F.= 8.59 PROTOTYPE FREQ., S.F.= 2.45 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	0.	1.99E-03	1.04E-04	-0.56	0.	0.56	180.00
28.57	8.92	0.12	3.62E-03	1.87E-04	-0.51	-0.04	0.52	184.38
57.14	17.83	0.25	3.11E-03	1.56E-04	-0.44	-0.07	0.44	189.06
85.71	26.75	0.37	3.07E-03	1.46E-04	-0.41	-0.11	0.42	194.78
114.29	35.67	0.49	3.18E-03	1.47E-04	-0.40	-0.16	0.43	201.68
142.86	44.59	0.61	3.25E-03	1.44E-04	-0.40	-0.21	0.45	207.66
171.43	53.50	0.74	3.38E-03	1.40E-04	-0.42	-0.26	0.50	211.13
200.00	62.42	0.86	3.42E-03	1.38E-04	-0.44	-0.28	0.52	212.65
228.57	71.34	0.98	3.66E-03	1.44E-04	-0.41	-0.30	0.51	216.48
257.14	80.25	1.10	4.18E-03	1.58E-04	-0.40	-0.33	0.52	219.75
285.71	89.17	1.23	4.53E-03	1.60E-04	-0.41	-0.35	0.54	220.34
314.29	98.09	1.35	4.85E-03	1.49E-04	-0.40	-0.40	0.57	224.59
342.86	107.01	1.47	5.29E-03	1.41E-04	-0.35	-0.44	0.57	231.60
371.43	115.92	1.59	5.41E-03	1.40E-04	-0.32	-0.45	0.55	235.13
400.00	124.84	1.72	5.20E-03	1.44E-04	-0.38	-0.43	0.57	228.93
428.57	133.76	1.84	5.11E-03	1.38E-04	-0.41	-0.45	0.61	227.53
457.14	142.67	1.96	5.46E-03	1.34E-04	-0.35	-0.53	0.63	236.14
485.71	151.59	2.08	5.60E-03	1.34E-04	-0.33	-0.54	0.64	238.43
514.29	160.51	2.21	5.11E-03	1.25E-04	-0.31	-0.52	0.60	239.26
542.86	169.43	2.33	4.58E-03	1.21E-04	-0.30	-0.52	0.60	240.17
571.43	178.34	2.45	4.22E-03	1.22E-04	-0.35	-0.53	0.63	236.72
600.00	187.26	2.57	3.92E-03	1.10E-04	-0.33	-0.54	0.63	238.48
628.57	196.18	2.70	3.62E-03	9.34E-05	-0.26	-0.53	0.59	243.64
657.14	205.09	2.82	3.15E-03	8.87E-05	-0.26	-0.50	0.56	242.75
685.71	214.01	2.94	2.71E-03	8.52E-05	-0.26	-0.47	0.54	240.70
714.29	222.93	3.06	2.45E-03	8.19E-05	-0.21	-0.44	0.48	244.53
742.86	231.85	3.19	2.30E-03	8.17E-05	-0.12	-0.44	0.45	254.31
771.43	240.76	3.31	2.15E-03	7.73E-05	-0.08	-0.48	0.49	260.38
800.00	249.68	3.43	1.95E-03	6.68E-05	-0.10	-0.52	0.53	258.68
828.57	258.60	3.55	1.72E-03	5.97E-05	-0.10	-0.51	0.52	258.68
857.14	267.51	3.68	1.50E-03	5.67E-05	-0.06	-0.48	0.48	262.57
885.71	276.43	3.80	1.41E-03	5.33E-05	-0.03	-0.46	0.46	266.23
914.29	285.35	3.92	1.39E-03	4.79E-05	0.02	-0.47	0.47	272.14
942.86	294.27	4.04	1.23E-03	3.97E-05	0.04	-0.41	0.41	275.63
971.43	303.18	4.17	1.08E-03	3.76E-05	0.07	-0.34	0.35	281.48
1000.00	312.10	4.29	9.89E-04	3.92E-05	0.13	-0.36	0.38	289.05

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$
CONFIG. MA-1

MACH NO.= 1.2 TAPE NO.= 5.C PART NO.=13.3 J= 6 I= 9
RJJ(0)= 4.2377E-01 RII(0)= 4.5449E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.02	0.02	1.70E 01	-0.03	1.80E 01	0.01
69	1.72E 01	0.03	0.01	1.67E 01	-0.02	1.78E 01	0.01
68	1.70E 01	0.02	0.00	1.65E 01	-0.00	1.75E 01	0.00
67	1.67E 01	0.00	-0.01	1.62E 01	0.01	1.73E 01	-0.01
66	1.65E 01	-0.02	-0.01	1.60E 01	0.00	1.70E 01	-0.02
65	1.62E 01	-0.02	-0.01	1.57E 01	-0.01	1.68E 01	-0.01
64	1.60E 01	-0.02	-0.01	1.55E 01	-0.01	1.65E 01	0.01
63	1.57E 01	-0.01	0.01	1.52E 01	0.01	1.63E 01	0.01
62	1.55E 01	-0.00	0.02	1.50E 01	0.01	1.60E 01	-0.00
61	1.52E 01	-0.00	0.02	1.47E 01	-0.00	1.58E 01	-0.02
60	1.50E 01	-0.00	-0.00	1.45E 01	-0.01	1.55E 01	-0.01
59	1.47E 01	-0.00	-0.01	1.42E 01	-0.01	1.53E 01	0.01
58	1.45E 01	0.01	-0.01	1.40E 01	-0.01	1.50E 01	0.02
57	1.42E 01	0.00	-0.01	1.37E 01	-0.01	1.48E 01	0.00
56	1.40E 01	-0.01	0.00	1.35E 01	-0.02	1.45E 01	-0.00
55	1.37E 01	-0.02	-0.00	1.32E 01	-0.03	1.43E 01	0.00
54	1.35E 01	-0.01	-0.00	1.30E 01	-0.03	1.40E 01	-0.00
53	1.32E 01	0.00	0.00	1.27E 01	-0.02	1.38E 01	-0.01
52	1.30E 01	0.01	0.01	1.25E 01	0.00	1.35E 01	-0.01
51	1.27E 01	0.01	0.01	1.22E 01	0.01	1.33E 01	-0.01
50	1.25E 01	0.00	0.01	1.20E 01	0.02	1.30E 01	-0.01
49	1.22E 01	-0.00	0.00	1.17E 01	-0.00	1.28E 01	-0.01
48	1.20E 01	-0.00	-0.02	1.15E 01	-0.03	1.25E 01	0.00
47	1.17E 01	-0.00	-0.02	1.12E 01	-0.02	1.23E 01	0.02
46	1.15E 01	-0.00	0.01	1.10E 01	0.00	1.20E 01	0.03
45	1.12E 01	0.01	0.03	1.07E 01	0.00	1.18E 01	0.01
44	1.10E 01	0.02	0.02	1.05E 01	-0.00	1.15E 01	0.00
43	1.07E 01	0.02	-0.01	1.02E 01	-0.01	1.13E 01	-0.00
42	1.05E 01	0.01	-0.02	9.96E 00	-0.01	1.10E 01	-0.01
41	1.02E 01	0.00	-0.02	9.71E 00	-0.01	1.08E 01	-0.01
40	10.00E 00	0.01	0.01	9.46E 00	-0.02	1.05E 01	0.01
39	9.75E 00	0.01	0.03	9.21E 00	-0.02	1.03E 01	0.02
38	9.50E 00	-0.00	0.01	8.96E 00	-0.00	1.00E 01	0.01
37	9.25E 00	-0.01	0.00	8.71E 00	0.01	9.79E 00	-0.01
36	9.00E 00	-0.01	0.00	8.46E 00	0.01	9.54E 00	-0.02
35	8.75E 00	0.00	-0.02	8.21E 00	0.02	9.29E 00	-0.01
34	8.50E 00	0.01	-0.02	7.96E 00	0.01	9.04E 00	0.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$
CONFIG. MA-1

MACH NO.= 1.2 TAPE NO.= 5.C PART NO.=13.3 J= 6 I= 9
RJJ(0)= 4.2377E-01 RII(0)= 4.5449E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU.
33	8.25E CC	0.01	C.01	7.71E CC	0.00	8.79E C0	C.C1
32	8.00E 0C	0.01	0.01	7.46E 00	0.01	8.54E 00	-0.01
31	7.75E 0C	0.01	-0.00	7.21E 0C	0.01	8.29E 00	-0.02
30	7.5CE CC	0.01	C.01	6.96E 00	-0.02	8.04E 00	-0.01
29	7.25E 0C	0.00	0.00	6.71E 00	-0.03	7.79E C0	-0.01
28	7.CCE CC	-0.01	-0.01	6.46E 0C	-0.02	7.54E 00	-C.C1
27	6.75E 0C	-0.00	0.00	6.21E CC	-0.02	7.29E 00	-0.C0
26	6.5CE CC	0.01	-0.00	5.96E C0	-0.C1	7.04E 00	0.C0
25	6.25E 0C	0.02	-0.01	5.71E 00	-0.01	6.79E 00	-0.C0
24	6.CCE 0C	0.02	C.00	5.46E 00	-0.00	6.54E 00	-0.C1
23	5.75E 0C	0.02	0.01	5.21E 00	0.01	6.29E 00	-0.C0
22	5.5CE CC	0.02	-0.00	4.96E C0	0.00	6.C4E 00	-0.C0
21	5.25E 0C	0.02	-0.02	4.71E 00	-0.02	5.79E 00	-0.C2
20	5.CCE 0C	0.01	0.00	4.46E 00	-0.02	5.54E 00	-C.CC
19	4.75E CC	-0.00	0.02	4.21E 00	-0.01	5.29E 00	0.02
18	4.5CE CC	-0.00	0.C1	3.96E C0	-0.02	5.04E 00	0.C1
17	4.25E 0C	0.00	C.00	3.71E C0	-0.03	4.79E 00	0.C1
16	4.0CE CC	0.0C	C.01	3.46E 00	-0.02	4.54E 00	C.C1
15	3.75E 00	0.00	0.02	3.21E 0C	0.01	4.29E 00	-0.C1
14	3.5CE CC	0.01	C.01	2.96E 00	0.C2	4.04E 00	-0.C2
13	3.25E 0C	0.C0	-0.01	2.71E 0C	C.00	3.79E 00	-0.C1
12	3.0CE 0C	0.01	-0.01	2.46E C0	-0.02	3.54E C0	0.C0
11	2.75E 0C	0.01	-C.C0	2.21E 00	-0.04	3.29E 00	0.C0
10	2.5CE CC	0.03	-0.00	1.96E 00	-0.10	3.04E 00	0.C1
9	2.25E CC	0.05	0.02	1.71E 00	-0.14	2.79E 00	C.C2
8	2.0CE 0C	0.05	C.01	1.46E 00	-0.09	2.54E 00	0.C2
7	1.75E CC	0.03	0.01	1.21E 00	0.08	2.29E 00	0.C0
6	1.5CE CC	-0.03	0.06	9.59E-C1	0.22	2.04E 00	-0.C1
5	1.25E CC	-0.13	0.01	7.09E-01	0.17	1.79E C0	-0.C1
4	10.00E-01	-0.18	0.00	4.59E-C1	0.02	1.54E 00	0.C0
3	7.5CE-C1	-0.14	-0.04	2.09E-C1	-0.06	1.29E 00	0.C2
2	5.00E-01	0.11	-0.20	-4.10E-02	-0.07	1.04E 00	0.03
1	2.5CE-01	0.66	0.37	-2.91E-01	-0.05	7.91E-01	C.C1
0	0.	1.00	1.00	-5.41E-01	-0.02	5.41E-01	-0.C2

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$
CONFIG. MA-1 MACH NO.= 1.2 TAPE NO.= 5.0 PART NO.=13.3 J= 6 I= 9
MODEL FREQ., S.F.= 8.59 PROTOTYPE FREQ., S.F.= 2.45 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	0.	2.01E-03	1.53E-04	-0.09	0.	0.09	180.00
28.57	8.92	0.12	3.68E-03	2.95E-04	-0.03	-0.09	0.10	254.51
57.14	17.83	0.25	3.13E-03	2.82E-04	0.07	-0.12	0.14	301.21
85.71	26.75	0.37	3.02E-03	2.73E-04	0.12	-0.14	0.18	311.06
114.29	35.67	0.49	3.15E-03	2.58E-04	0.11	-0.08	0.14	323.47
142.86	44.59	0.61	3.34E-03	2.52E-04	0.09	0.04	0.10	24.18
171.43	53.50	0.74	3.55E-03	2.58E-04	0.12	0.07	0.14	32.07
200.00	62.42	0.86	3.50E-03	2.57E-04	0.12	0.06	0.13	25.01
228.57	71.34	0.98	3.49E-03	2.54E-04	0.13	0.12	0.17	42.76
257.14	80.25	1.10	3.83E-03	2.50E-04	0.11	0.22	0.25	63.26
285.71	89.17	1.23	4.24E-03	2.42E-04	0.01	0.29	0.29	88.62
314.29	98.09	1.35	4.65E-03	2.33E-04	-0.04	0.29	0.29	97.66
342.86	107.01	1.47	5.16E-03	2.27E-04	-0.02	0.28	0.29	94.94
371.43	115.92	1.59	5.51E-03	2.48E-04	-0.05	0.32	0.32	99.27
400.00	124.84	1.72	5.38E-03	2.76E-04	-0.10	0.34	0.35	106.90
428.57	133.76	1.84	5.12E-03	2.96E-04	-0.24	0.28	0.37	130.36
457.14	142.67	1.96	5.30E-03	3.06E-04	-0.36	0.20	0.41	150.81
485.71	151.59	2.08	5.44E-03	3.18E-04	-0.39	0.15	0.41	159.30
514.29	160.51	2.21	5.21E-03	3.52E-04	-0.42	0.12	0.43	164.43
542.86	169.43	2.33	4.82E-03	3.45E-04	-0.42	0.09	0.43	167.63
571.43	178.34	2.45	4.26E-03	3.05E-04	-0.37	0.04	0.37	173.96
600.00	187.26	2.57	3.89E-03	3.23E-04	-0.36	-0.05	0.36	188.07
628.57	196.18	2.70	3.62E-03	3.56E-04	-0.35	-0.11	0.36	197.21
657.14	205.09	2.82	3.19E-03	3.28E-04	-0.26	-0.15	0.30	208.89
685.71	214.01	2.94	2.82E-03	3.20E-04	-0.21	-0.21	0.29	225.63
714.29	222.93	3.06	2.54E-03	3.46E-04	-0.18	-0.22	0.28	231.26
742.86	231.85	3.19	2.20E-03	3.26E-04	-0.12	-0.18	0.22	236.56
771.43	240.76	3.31	2.15E-03	3.15E-04	-0.06	-0.19	0.20	253.93
800.00	249.68	3.43	2.01E-03	3.35E-04	0.01	-0.24	0.24	273.37
828.57	259.60	3.55	1.79E-03	3.33E-04	0.05	-0.23	0.23	281.51
857.14	267.51	3.68	1.46E-03	3.19E-04	0.06	-0.22	0.23	284.50
885.71	276.43	3.80	1.34E-03	3.02E-04	0.10	-0.26	0.28	292.14
914.29	285.35	3.92	1.41E-03	2.68E-04	0.18	-0.27	0.32	304.45
942.86	294.27	4.04	1.29E-03	2.42E-04	0.23	-0.19	0.30	319.30
971.43	303.18	4.17	1.11E-03	2.48E-04	0.27	-0.10	0.29	340.25
1000.00	312.10	4.29	9.52E-04	2.54E-04	0.27	-0.04	0.28	352.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$ MACH NO.= 1.5 TAPE NO.= 6.0 PART NO.=16.3 J= 6 I= 7
CONFIG. MA-1 RJJ(0)= 1.4957E-01 RII(0)= 2.3423E-03

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.00	0.03	1.69E 01	-0.01	1.81E 01	-0.02
69	1.72E 01	0.02	0.03	1.67E 01	0.01	1.78E 01	-0.02
68	1.70E 01	0.03	0.03	1.64E 01	0.01	1.76E 01	-0.02
67	1.67E 01	0.02	0.03	1.62E 01	-0.02	1.73E 01	-0.01
66	1.65E 01	-0.00	0.02	1.59E 01	-0.02	1.71E 01	-0.02
65	1.62E 01	-0.01	0.01	1.57E 01	-0.02	1.68E 01	-0.04
64	1.60E 01	-0.00	0.01	1.54E 01	-0.02	1.66E 01	-0.03
63	1.57E 01	0.01	0.02	1.52E 01	-0.01	1.63E 01	-0.01
62	1.55E 01	0.01	0.02	1.49E 01	-0.01	1.61E 01	0.01
61	1.52E 01	0.01	0.02	1.47E 01	-0.02	1.58E 01	0.01
60	1.50E 01	0.02	0.03	1.44E 01	-0.03	1.56E 01	-0.00
59	1.47E 01	0.03	0.02	1.42E 01	-0.02	1.53E 01	-0.01
58	1.45E 01	0.02	0.03	1.39E 01	-0.00	1.51E 01	-0.02
57	1.42E 01	0.01	0.04	1.37E 01	0.00	1.48E 01	-0.02
56	1.40E 01	0.01	0.05	1.34E 01	0.01	1.46E 01	-0.02
55	1.37E 01	0.01	0.05	1.32E 01	0.00	1.43E 01	-0.02
54	1.35E 01	0.02	0.03	1.29E 01	-0.01	1.41E 01	-0.01
53	1.32E 01	0.01	0.02	1.27E 01	-0.01	1.38E 01	-0.02
52	1.30E 01	0.00	0.01	1.24E 01	-0.02	1.36E 01	-0.03
51	1.27E 01	-0.00	0.01	1.22E 01	-0.03	1.33E 01	-0.02
50	1.25E 01	-0.00	0.01	1.19E 01	-0.01	1.31E 01	-0.01
49	1.22E 01	0.01	0.02	1.17E 01	0.00	1.28E 01	-0.01
48	1.20E 01	0.02	0.02	1.14E 01	-0.00	1.26E 01	-0.01
47	1.17E 01	0.01	0.00	1.12E 01	0.00	1.23E 01	-0.00
46	1.15E 01	0.01	-0.00	1.09E 01	0.01	1.21E 01	-0.00
45	1.12E 01	-0.00	0.00	1.07E 01	0.02	1.18E 01	-0.01
44	1.10E 01	-0.00	0.01	1.04E 01	0.02	1.16E 01	-0.02
43	1.07E 01	0.01	0.01	1.02E 01	0.01	1.13E 01	-0.02
42	1.05E 01	0.01	0.01	9.95E 00	0.00	1.11E 01	-0.00
41	1.02E 01	0.01	0.02	9.70E 00	0.01	1.08E 01	-0.00
40	10.00E 00	0.00	0.04	9.45E 00	0.00	1.06E 01	-0.01
39	9.75E 00	0.01	0.04	9.20E 00	-0.01	1.03E 01	-0.00
38	9.50E 00	0.01	0.03	8.95E 00	-0.02	1.01E 01	-0.01
37	9.25E 00	0.00	0.03	8.70E 00	-0.01	9.80E 00	-0.02
36	9.00E 00	0.00	0.06	8.45E 00	-0.01	9.55E 00	-0.02
35	8.75E 00	-0.00	0.06	8.20E 00	-0.01	9.30E 00	-0.01
34	8.50E 00	-0.01	0.05	7.95E 00	-0.01	9.05E 00	-0.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$ MACH NO.= 1.5 TAPE NO.= 6.C PART NO.=16.3 J= 6 I= 7
CONFIG. MA-1 RJJ(0)= 1.4957E-01 RII(0)= 2.3423E-03

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C
33	8.25E CC	-0.01	0.04	7.70E OC	-0.02	8.80E 00	-0.C2
32	8.00E OC	0.01	0.04	7.45E OC	-0.02	8.55E 00	-0.03
31	7.75E OC	0.02	0.03	7.20E CC	-0.02	8.30E 00	-0.02
30	7.50E CC	0.02	C.03	6.95E 00	-0.01	8.05E 00	-0.C1
29	7.25E CC	0.01	0.03	6.70E 00	-0.02	7.80E 00	-C.C0
28	7.CCE CC	0.01	0.03	6.45E OC	-0.03	7.55E 00	-0.C1
27	6.75E OC	0.01	0.04	6.20E 00	-0.03	7.30E 00	-0.02
26	6.50E CC	0.02	0.04	5.95E OC	-0.03	7.05E 00	-0.C2
25	6.25E OC	0.03	0.04	5.70E 00	-0.02	6.80E 00	-0.02
24	6.CCE CC	0.03	0.04	5.45E OC	-0.02	6.55E OC	-0.C2
23	5.75E OC	0.03	0.04	5.20E 00	-0.01	6.30E 00	-0.C2
22	5.50E CC	0.02	0.06	4.95E OC	-0.01	6.05E 00	-0.C2
21	5.25E OC	0.00	0.06	4.70E 00	-0.02	5.80E 00	-0.C2
20	5.CCE OC	-0.01	0.04	4.45E OC	-0.02	5.55E 00	-0.C1
19	4.75E OC	-0.01	0.03	4.20E 00	-0.03	5.30E 00	-0.00
18	4.50E CC	0.00	0.04	3.95E OC	-0.04	5.05E CO	-0.C1
17	4.25E OC	0.01	0.05	3.70E CO	-0.04	4.80E 00	-0.01
16	4.00E CC	0.01	0.07	3.45E OC	-0.03	4.55E 00	-0.C1
15	3.75E 00	0.01	0.08	3.20E 00	-0.02	4.30E 00	-0.C2
14	3.50E CC	0.00	0.06	2.95E 00	-0.00	4.05E 00	-0.C2
13	3.25E OC	0.02	0.04	2.70E 00	0.01	3.80E 00	-0.02
12	3.CCE OC	0.03	C.02	2.45E CC	0.00	3.55E 00	-0.C2
11	2.75E CC	0.02	0.03	2.20E CO	-0.01	3.30E 00	-0.C2
10	2.50E CC	0.01	0.05	1.95E CC	-0.03	3.05E 00	-C.C1
9	2.25E OC	0.01	0.07	1.70E 00	-0.05	2.80E 00	-C.01
8	2.CCE OC	0.02	0.06	1.45E CC	-0.03	2.55E 00	-0.C2
7	1.75E OC	0.06	C.08	1.20E 00	0.02	2.30E 00	-C.C3
6	1.50E 00	0.06	0.12	9.49E-01	0.07	2.05E 00	-0.C4
5	1.25E OC	-0.00	0.11	6.99E-01	0.01	1.80E 00	-0.04
4	10.CCE-01	-0.07	C.07	4.49E-01	-0.26	1.55E 00	-0.C5
3	7.50E-01	-0.16	0.03	1.99E-01	-0.45	1.30E 00	-0.04
2	5.00E-01	-0.04	C.10	-5.10E-02	-0.28	1.05E 00	-0.C1
1	2.50E-01	0.56	C.6C	-3.01E-01	0.02	8.01E-01	0.C4
0	0.	1.00	1.00	-5.51E-01	0.10	5.51E-01	0.10

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$

CONFIG. MA-1 MACH NO.= 1.5 TAPE NO.= 6.0 PART NO.=16.3 J= 6 I= 7
MODEL FREQ., S.F.=32.60 PROTOTYPE FREQ., S.F.= 2.45 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	0.	2.93E-03	1.05E-04	-0.48	0.	0.48	180.00
28.57	9.06	0.10	5.08E-03	1.65E-04	-0.45	0.02	0.45	177.81
57.14	18.12	0.20	4.15E-03	1.04E-04	-0.36	-0.04	0.37	187.07
85.71	27.18	0.30	3.84E-03	8.64E-05	-0.31	-0.04	0.31	188.11
114.29	36.24	0.40	3.89E-03	8.75E-05	-0.32	0.01	0.32	178.41
142.86	45.30	0.50	4.16E-03	8.31E-05	-0.36	-0.01	0.37	181.31
171.43	54.36	0.60	4.02E-03	7.42E-05	-0.34	-0.07	0.35	192.27
200.00	63.42	0.70	3.63E-03	7.97E-05	-0.34	-0.10	0.35	197.29
228.57	72.48	0.80	3.41E-03	7.90E-05	-0.40	-0.13	0.42	197.77
257.14	81.54	0.90	3.81E-03	6.62E-05	-0.41	-0.22	0.46	207.91
285.71	90.60	1.00	4.46E-03	6.22E-05	-0.38	-0.25	0.45	213.38
314.29	99.66	1.10	4.74E-03	6.35E-05	-0.38	-0.25	0.46	213.13
342.86	108.72	1.20	4.78E-03	6.20E-05	-0.37	-0.29	0.47	217.53
371.43	117.78	1.30	4.75E-03	5.62E-05	-0.31	-0.30	0.43	223.74
400.00	126.84	1.40	4.83E-03	5.42E-05	-0.34	-0.31	0.46	222.05
428.57	135.90	1.50	4.87E-03	6.00E-05	-0.44	-0.30	0.53	214.11
457.14	144.96	1.60	5.02E-03	6.69E-05	-0.48	-0.26	0.54	208.33
485.71	154.02	1.70	5.54E-03	7.29E-05	-0.47	-0.25	0.53	208.22
514.29	163.08	1.80	5.88E-03	7.46E-05	-0.46	-0.28	0.54	211.09
542.86	172.14	1.90	5.70E-03	7.45E-05	-0.45	-0.31	0.55	214.40
571.43	181.20	2.00	5.41E-03	7.42E-05	-0.43	-0.35	0.55	219.36
600.00	190.26	2.10	5.33E-03	6.59E-05	-0.43	-0.36	0.56	219.98
628.57	199.32	2.20	5.42E-03	5.71E-05	-0.42	-0.37	0.56	221.10
657.14	208.38	2.30	5.58E-03	5.55E-05	-0.40	-0.40	0.56	224.57
685.71	217.44	2.40	5.29E-03	5.61E-05	-0.39	-0.41	0.57	226.01
714.29	226.50	2.50	4.76E-03	5.85E-05	-0.35	-0.40	0.53	228.37
742.86	235.56	2.60	4.49E-03	5.97E-05	-0.29	-0.39	0.49	233.03
771.43	244.62	2.70	4.10E-03	5.93E-05	-0.28	-0.42	0.50	235.86
800.00	253.68	2.80	3.62E-03	5.71E-05	-0.32	-0.44	0.54	234.44
828.57	262.74	2.90	3.25E-03	4.93E-05	-0.32	-0.44	0.54	234.04
857.14	271.80	3.00	2.94E-03	4.24E-05	-0.28	-0.42	0.50	235.67
885.71	280.86	3.10	2.84E-03	4.19E-05	-0.26	-0.41	0.48	237.99
914.29	289.92	3.20	2.77E-03	4.03E-05	-0.22	-0.44	0.50	243.20
942.86	298.98	3.30	2.55E-03	3.32E-05	-0.21	-0.45	0.50	244.97
971.43	308.04	3.40	2.27E-03	2.89E-05	-0.20	-0.41	0.46	244.29
1000.00	317.10	3.50	2.14E-03	2.82E-05	-0.16	-0.44	0.46	250.32

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$ MACH NO.= 1.5 TAPE NO.= 6.0 PART NO.=16.3 J= 6 I= 9
CONFIG. MA-1 PJJ(0)= 1.5056E-01 RII(0)= 3.8722E-03

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.01	-0.00	1.70E 01	0.02	1.80E 01	-0.00
69	1.72E 01	0.02	-0.00	1.67E 01	0.01	1.78E 01	-0.01
68	1.70E 01	0.02	-0.01	1.65E 01	-0.00	1.75E 01	0.00
67	1.67E 01	0.01	-0.00	1.62E 01	0.00	1.73E 01	0.01
66	1.65E 01	0.00	-0.00	1.60E 01	0.01	1.70E 01	0.00
65	1.62E 01	0.01	-0.01	1.57E 01	0.03	1.68E 01	-0.01
64	1.60E 01	0.02	-0.01	1.55E 01	0.03	1.65E 01	-0.01
63	1.57E 01	0.01	-0.00	1.52E 01	0.02	1.63E 01	-0.00
62	1.55E 01	0.01	0.00	1.50E 01	0.01	1.60E 01	-0.00
61	1.52E 01	0.01	-0.00	1.47E 01	0.00	1.58E 01	-0.01
60	1.50E 01	0.01	0.00	1.45E 01	-0.00	1.55E 01	-0.02
59	1.47E 01	0.01	0.00	1.42E 01	-0.00	1.53E 01	-0.01
58	1.45E 01	0.01	-0.01	1.40E 01	0.01	1.50E 01	0.01
57	1.42E 01	0.01	-0.01	1.37E 01	0.02	1.48E 01	0.02
56	1.40E 01	0.02	-0.01	1.35E 01	0.03	1.45E 01	0.00
55	1.37E 01	0.02	-0.02	1.32E 01	0.03	1.43E 01	-0.02
54	1.35E 01	0.01	-0.03	1.30E 01	0.02	1.40E 01	-0.03
53	1.32E 01	0.00	-0.02	1.27E 01	0.01	1.38E 01	-0.02
52	1.30E 01	-0.00	-0.02	1.25E 01	0.01	1.35E 01	-0.01
51	1.27E 01	-0.00	-0.01	1.22E 01	-0.00	1.33E 01	-0.00
50	1.25E 01	0.02	-0.01	1.20E 01	-0.02	1.30E 01	-0.00
49	1.22E 01	0.03	-0.02	1.17E 01	-0.01	1.28E 01	-0.01
48	1.20E 01	0.03	-0.02	1.15E 01	-0.01	1.25E 01	-0.02
47	1.17E 01	0.01	-0.01	1.12E 01	-0.01	1.23E 01	-0.02
46	1.15E 01	0.01	-0.02	1.10E 01	-0.01	1.20E 01	-0.01
45	1.12E 01	0.00	-0.02	1.07E 01	-0.01	1.18E 01	-0.01
44	1.10E 01	0.00	-0.02	1.05E 01	0.01	1.15E 01	-0.01
43	1.07E 01	0.01	-0.01	1.02E 01	0.02	1.13E 01	-0.01
42	1.05E 01	0.01	-0.01	9.96E 00	0.00	1.10E 01	0.01
41	1.02E 01	0.02	-0.01	9.71E 00	-0.02	1.08E 01	0.01
40	10.00E 00	0.03	-0.00	9.46E 00	-0.01	1.05E 01	-0.00
39	9.75E 00	0.03	-0.02	9.21E 00	-0.00	1.03E 01	-0.01
38	9.50E 00	0.03	-0.01	8.96E 00	-0.01	1.00E 01	-0.01
37	9.25E 00	0.02	0.01	8.71E 00	-0.01	9.79E 00	-0.01
36	9.00E 00	0.00	0.02	8.46E 00	-0.00	9.54E 00	-0.01
35	8.75E 00	-0.00	0.02	8.21E 00	-0.01	9.29E 00	-0.01
34	8.50E 00	0.01	0.03	7.96E 00	-0.00	9.04E 00	-0.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$ MACH NO.= 1.5 TAPE NO.= 6.0 PART NO.=16.3 J= 6 I= 9
CONFIG. MA-1 RJJ(0)= 1.5056E-01 RII(0)= 3.8722E-03

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E CC	0.01	0.02	7.71E 00	0.00	8.79E 00	-0.01
32	8.00E CC	-0.01	0.02	7.46E 00	0.00	8.54E 00	0.01
31	7.75E CC	-0.01	0.03	7.21E 00	0.00	8.29E 00	0.01
30	7.50E CC	-0.00	0.04	6.96E 00	0.01	8.04E 00	-0.01
29	7.25E CC	0.00	0.04	6.71E 00	0.01	7.79E 00	-0.02
28	7.00E 00	0.01	0.04	6.46E 00	0.01	7.54E 00	-0.00
27	6.75E 00	0.02	0.04	6.21E 00	0.01	7.29E 00	-0.00
26	6.50E CC	0.02	0.05	5.96E 00	0.01	7.04E 00	-0.01
25	6.25E CC	0.03	0.05	5.71E 00	0.00	6.79E 00	-0.01
24	6.00E CC	0.03	0.05	5.46E 00	0.00	6.54E 00	-0.01
23	5.75E 00	0.02	0.06	5.21E 00	0.01	6.29E 00	0.00
22	5.50E CC	0.01	0.04	4.96E 00	0.02	6.04E 00	-0.00
21	5.25E 00	0.00	0.05	4.71E 00	0.03	5.79E 00	0.00
20	5.00E CC	0.01	0.07	4.46E 00	0.03	5.54E 00	0.01
19	4.75E CC	0.01	0.07	4.21E 00	0.03	5.29E 00	0.00
18	4.50E CC	0.01	0.07	3.96E 00	0.02	5.04E 00	-0.01
17	4.25E 00	0.01	0.08	3.71E 00	0.02	4.79E 00	-0.02
16	4.00E CC	0.01	0.09	3.46E 00	0.02	4.54E 00	-0.01
15	3.75E CC	0.01	0.10	3.21E 00	0.02	4.29E 00	-0.00
14	3.50E CC	0.02	0.11	2.96E 00	0.01	4.04E 00	-0.01
13	3.25E CC	0.02	0.12	2.71E 00	-0.00	3.79E 00	-0.01
12	3.00E CC	0.02	0.14	2.46E 00	0.01	3.54E 00	-0.01
11	2.75E 00	0.02	0.14	2.21E 00	0.00	3.29E 00	-0.00
10	2.50E CC	0.01	0.14	1.96E 00	-0.01	3.04E 00	-0.01
9	2.25E CC	0.01	0.16	1.71E 00	-0.05	2.79E 00	0.00
8	2.00E 00	0.02	0.16	1.46E 00	-0.08	2.54E 00	0.02
7	1.75E CC	0.04	0.18	1.21E 00	0.06	2.29E 00	0.04
6	1.50E CC	0.04	0.22	9.59E-01	0.25	2.04E 00	0.04
5	1.25E 00	-0.01	0.18	7.09E-01	0.20	1.79E 00	0.03
4	10.00E-01	-0.09	0.21	4.59E-01	0.01	1.54E 00	0.02
3	7.50E-01	-0.18	0.20	2.09E-01	-0.04	1.29E 00	0.01
2	5.00E-01	-0.06	0.11	-4.10E-02	-0.00	1.04E 00	0.01
1	2.50E-01	0.56	0.54	-2.91E-01	0.01	7.91E-01	0.02
0	0.	1.00	1.00	-5.41E-01	0.02	5.41E-01	0.02

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$

CONFIG. MA-1 MACH NO.= 1.5 TAPE NO.= 6.0 PART NO.=16.3 J= 6 I= 9
MODEL FREQ., S.F.=32.60 PROTOTYPE FREQ., S.F.= 2.45 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	0.	2.80E-03	2.39E-04	0.14	-0.	0.14	360.00
28.57	9.06	0.10	4.66E-03	4.25E-04	0.18	0.07	0.19	19.75
57.14	18.12	0.20	3.73E-03	2.90E-04	0.22	0.08	0.23	19.36
85.71	27.18	0.30	3.68E-03	1.75E-04	0.18	0.07	0.19	22.55
114.29	36.24	0.40	3.50E-03	1.38E-04	0.15	-0.01	0.15	356.75
142.86	45.30	0.50	3.51E-03	1.14E-04	0.17	-0.05	0.18	342.61
171.43	54.36	0.60	3.87E-03	8.42E-05	0.18	0.01	0.18	1.70
200.00	63.42	0.70	3.98E-03	7.08E-05	0.17	0.06	0.18	19.72
228.57	72.48	0.80	3.63E-03	7.34E-05	0.10	0.17	0.20	59.51
257.14	81.54	0.90	3.64E-03	7.88E-05	0.04	0.28	0.28	80.95
285.71	90.60	1.00	4.37E-03	7.81E-05	0.02	0.34	0.34	87.33
314.29	99.66	1.10	5.02E-03	7.96E-05	-0.04	0.41	0.41	94.93
342.86	108.72	1.20	4.89E-03	7.97E-05	-0.08	0.39	0.39	101.04
371.43	117.78	1.30	4.63E-03	7.48E-05	-0.09	0.31	0.32	105.78
400.00	126.84	1.40	5.02E-03	7.33E-05	-0.15	0.28	0.32	117.52
428.57	135.90	1.50	5.34E-03	7.38E-05	-0.20	0.28	0.35	124.88
457.14	144.96	1.60	5.40E-03	7.82E-05	-0.18	0.24	0.30	126.81
485.71	154.02	1.70	5.75E-03	7.85E-05	-0.23	0.17	0.28	143.76
514.29	163.08	1.80	5.74E-03	7.53E-05	-0.29	0.11	0.31	158.24
542.86	172.14	1.90	5.46E-03	8.04E-05	-0.30	0.01	0.30	177.44
571.43	181.20	2.00	5.64E-03	8.45E-05	-0.31	-0.06	0.32	191.77
600.00	190.26	2.10	5.78E-03	8.12E-05	-0.31	-0.09	0.33	195.46
628.57	199.32	2.20	5.67E-03	8.10E-05	-0.33	-0.12	0.35	199.70
657.14	208.38	2.30	5.42E-03	8.58E-05	-0.31	-0.14	0.34	203.99
685.71	217.44	2.40	5.07E-03	8.48E-05	-0.28	-0.18	0.33	212.43
714.29	226.50	2.50	4.85E-03	7.57E-05	-0.27	-0.23	0.36	219.93
742.86	235.56	2.60	4.44E-03	7.17E-05	-0.24	-0.30	0.39	232.10
771.43	244.62	2.70	3.94E-03	7.58E-05	-0.19	-0.35	0.40	241.09
800.00	253.68	2.80	3.80E-03	7.42E-05	-0.12	-0.32	0.34	249.79
828.57	262.74	2.90	3.71E-03	6.89E-05	-0.04	-0.36	0.36	263.79
857.14	271.80	3.00	3.35E-03	6.72E-05	0.02	-0.38	0.38	273.33
885.71	280.86	3.10	2.99E-03	6.44E-05	0.10	-0.31	0.33	287.58
914.29	289.92	3.20	2.80E-03	6.11E-05	0.19	-0.27	0.33	304.86
942.86	298.98	3.30	2.66E-03	6.05E-05	0.26	-0.31	0.41	309.98
971.43	308.04	3.40	2.44E-03	6.12E-05	0.27	-0.30	0.41	312.33
1000.00	317.10	3.50	2.16E-03	6.20E-05	0.23	-0.21	0.32	317.59

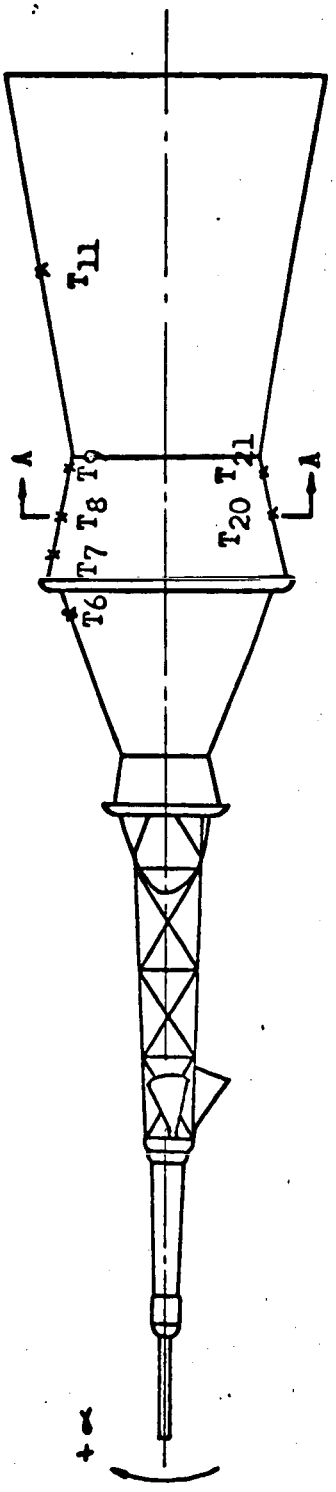
6. TULLAHOMA MA-2 CONFIGURATION, 32% SCALE

FLUCTUATING PRESSURE DATA

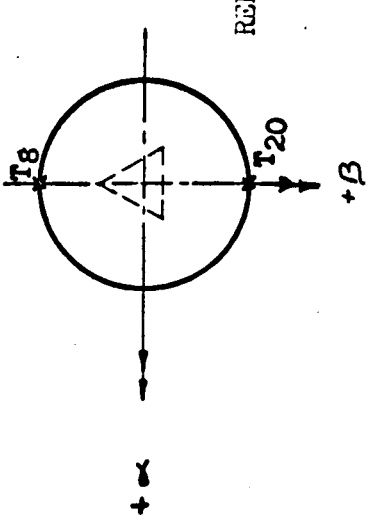
TEST INFORMATION AND DATA REDUCTION PARAMETERS

Wind Tunnel	AEDC 16' x 16' Propulsion
Date of Test	October 1960
Model Size	32%
Sample Rate	4,000/sec.
No. of Samples	12,000
No. of Special Estimates	70
Degrees of Freedom	343
Filter Bandwidth (Prototype Frequency)	17.02 - 17.41 cps
Characteristic Length (Model)	.291 ft.

TRANSDUCER LOCATION - 32⅞ TULAHOMA
MA-2 MERCURY-ATLAS CONFIGURATION



Section A-A



TRANSDUCER	ADAPTER Z-STATION (PROTOTYPE)
T6	105.9 (effective)
T7	99.0
T8	78.0
T9	58.0
T11	-10.0 (effective)
T20	78.0
T21	58.0

INDEX OF PLOTS AND TABULATIONS
TULLAHOMA 32% MERCURY-ATLAS
MA-2 CONFIGURATION

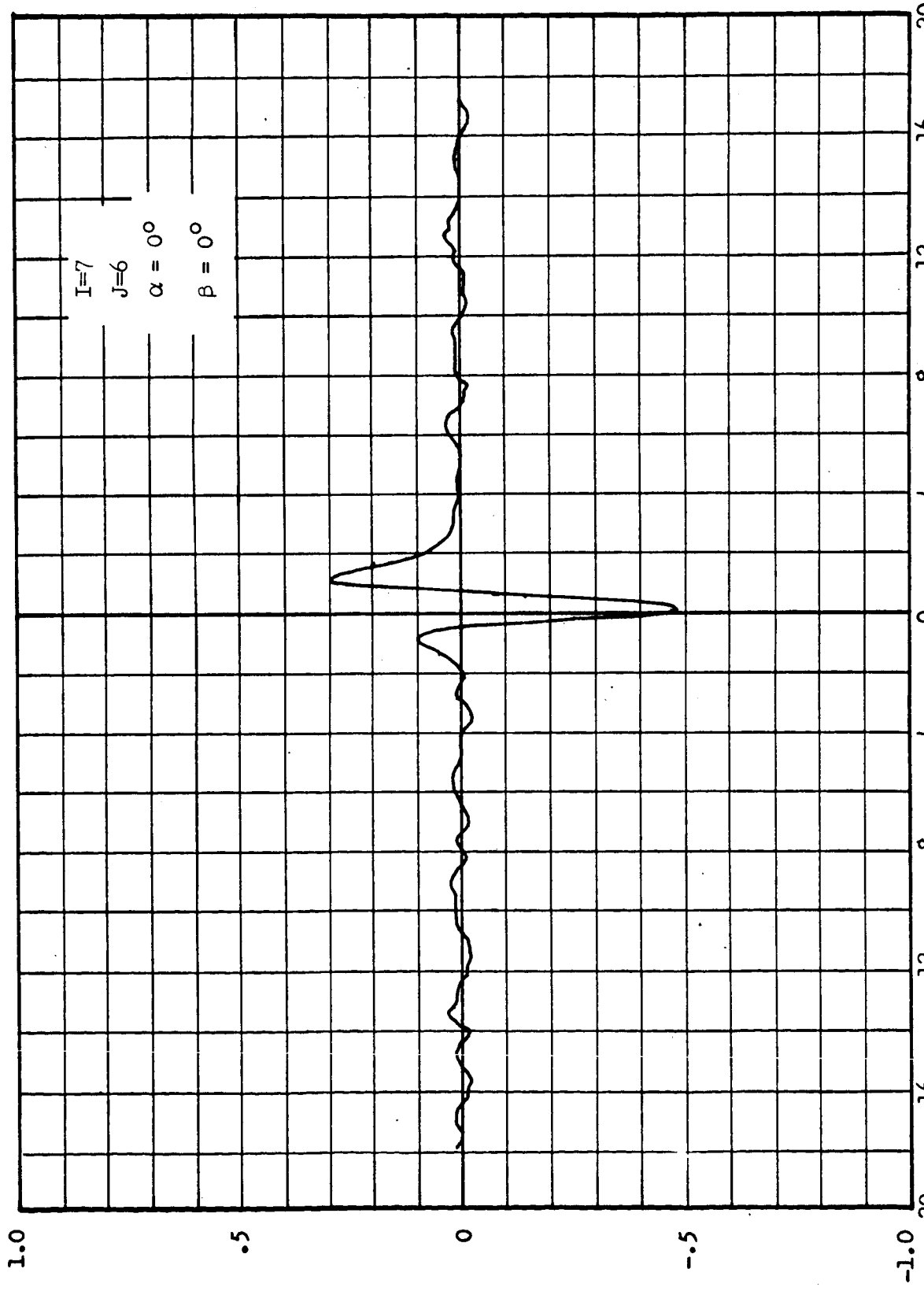
Mach No.	α	β	Correl. I x J	Item	Plot Page	Tabulation Page
1.0	0°	0°	7 x 6	Auto 7 x 7	——	94
				Auto 6 x 6	——	94
				Cross 7 x 6	70	94
				PSD 7 x 7	71	96
				PSD 6 x 6	72	96
				C & Q 7 x 6	73	96
				MOC 7 x 6	——	96
			7 x 6	POC 7 x 6	——	96
			9 x 6	Auto 9 x 9	——	97
				Auto 6 x 6	——	97
				Cross 9 x 6	74	97
				PSD 9 x 9	75	99
				PSD 6 x 6	76	99
				C & Q 9 x 6	77	99
				MOC 9 x 6	——	99
			9 x 6	POC 9 x 6	——	99
			9 x 8	Auto 9 x 9	——	100
				Auto 8 x 8	——	100
				Cross 9 x 8	78	100
				PSD 9 x 9	79	102
				PSD 8 x 8	80	102

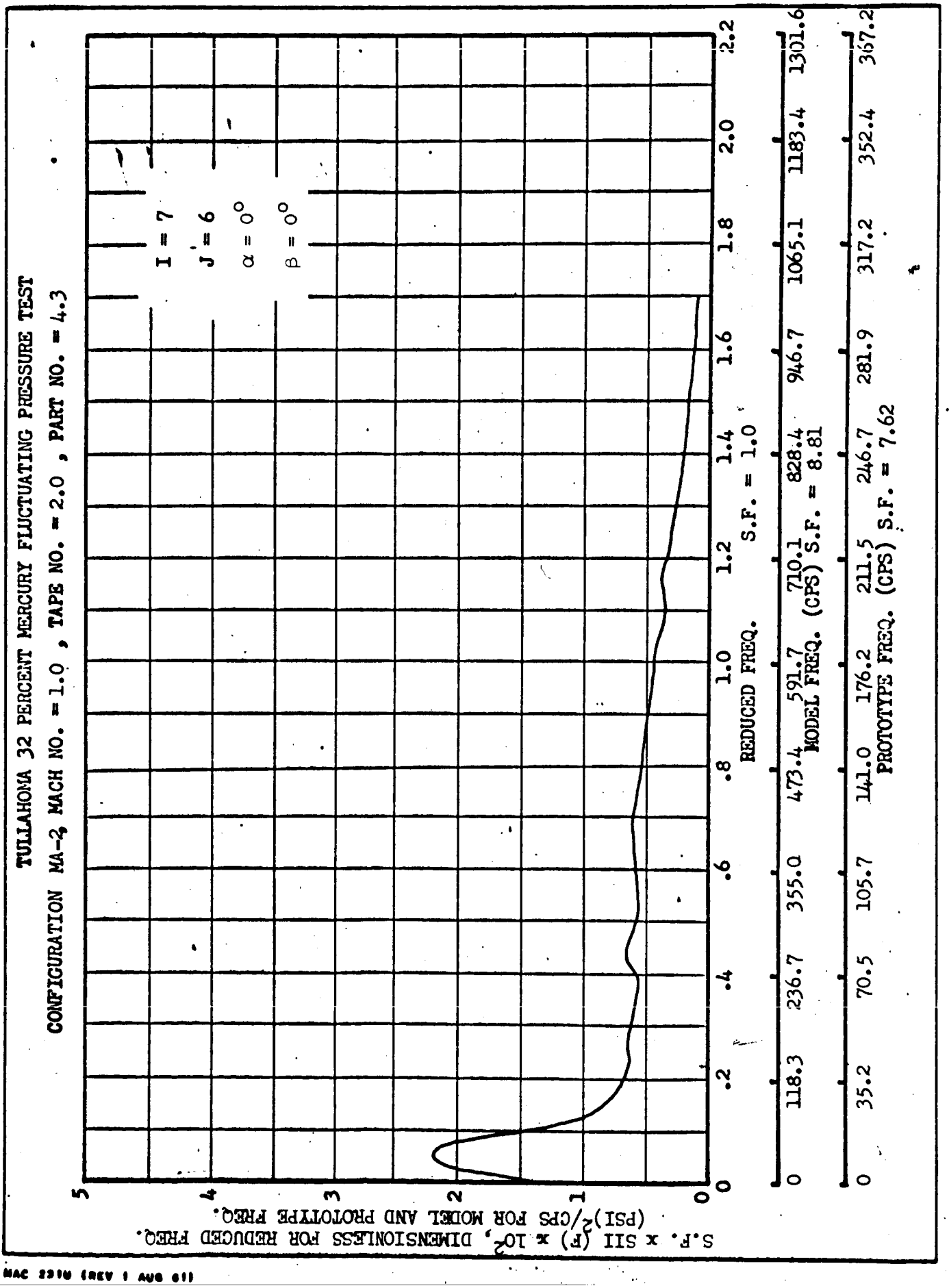
Mach No.	α	β	Correl. I x J	Item	Plot Page	Tabulation Page
				C & Q 9 x 8	81	102
				MOC 9 x 8	——	102
1.0	0°	0°	9 x 8	POC 9 x 8	——	102
1.2	0°	0°	7 x 6	Auto 7 x 7	——	103
				Auto 6 x 6	——	103
				Cross 7 x 6	82	103
				PSD 7 x 7	83	105
				PSD 6 x 6	84	105
				C & Q 7 x 6	85	105
				MOC 7 x 6	——	105
			7 x 6	POC 7 x 6	——	105
			9 x 6	Auto 9 x 9	——	106
				Auto 6 x 6	——	106
				Cross 9 x 6	86	106
				PSD 9 x 9	87	108
				PSD 6 x 6	88	108
				C & Q 9 x 6	89	108
				MOC 9 x 6	——	108
			9 x 6	POC 9 x 6	——	108
			11 x 7	Auto 11 x 11	——	109
				Auto 7 x 7	——	109
				Cross 11 x 7	90	109
				PSD 11 x 11	91	111
				PSD 7 x 7	92	111

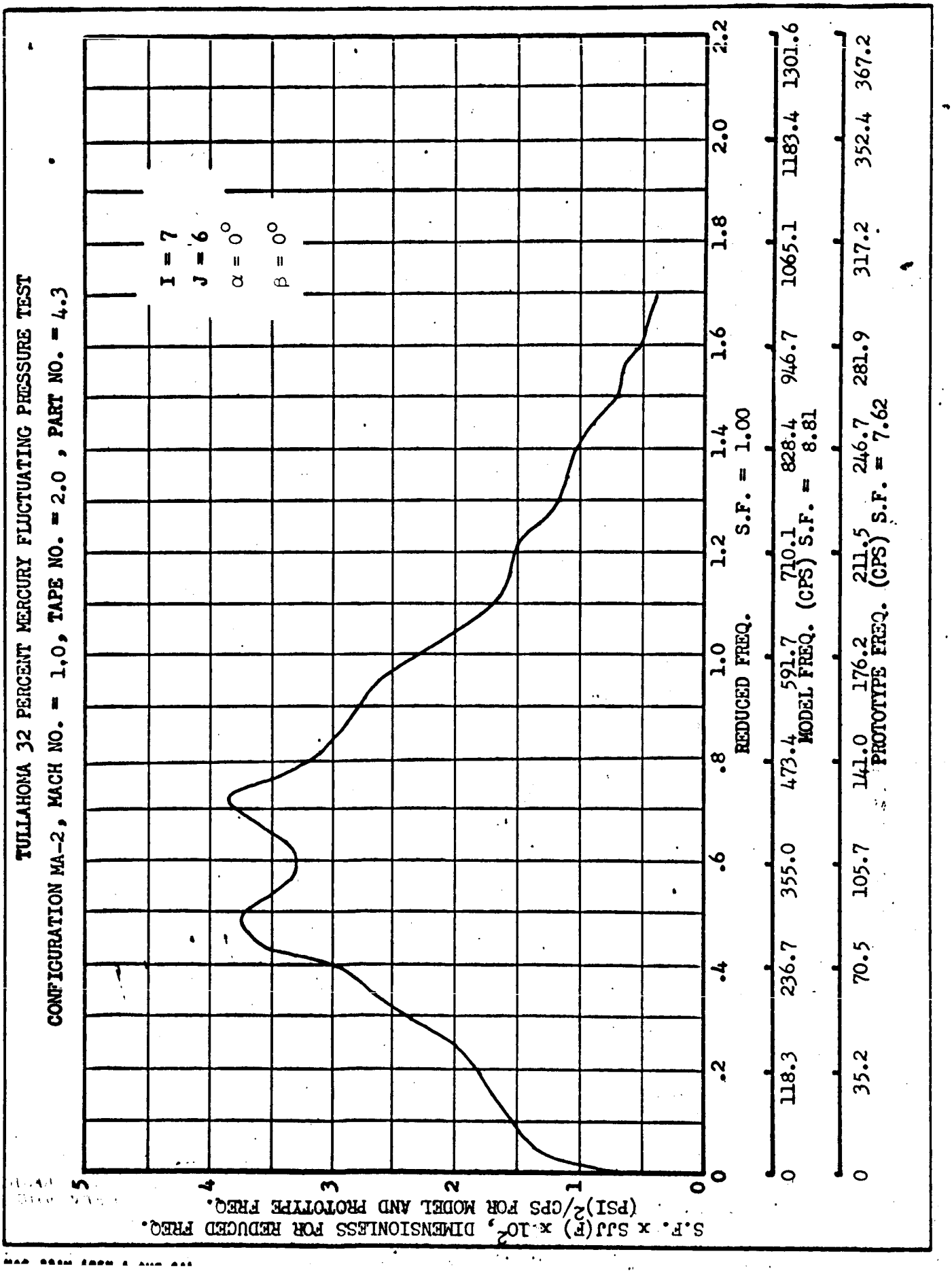
Mach No.	α	β	Correl. I x J	Item	Plot Page	Tabulation Page
↓	↓	↓	↓	C & Q 11 x 7	93	111
				MOC 11 x 7	----	111
1.2	0°	0°	11 x 7	POC 11 x 7	----	111

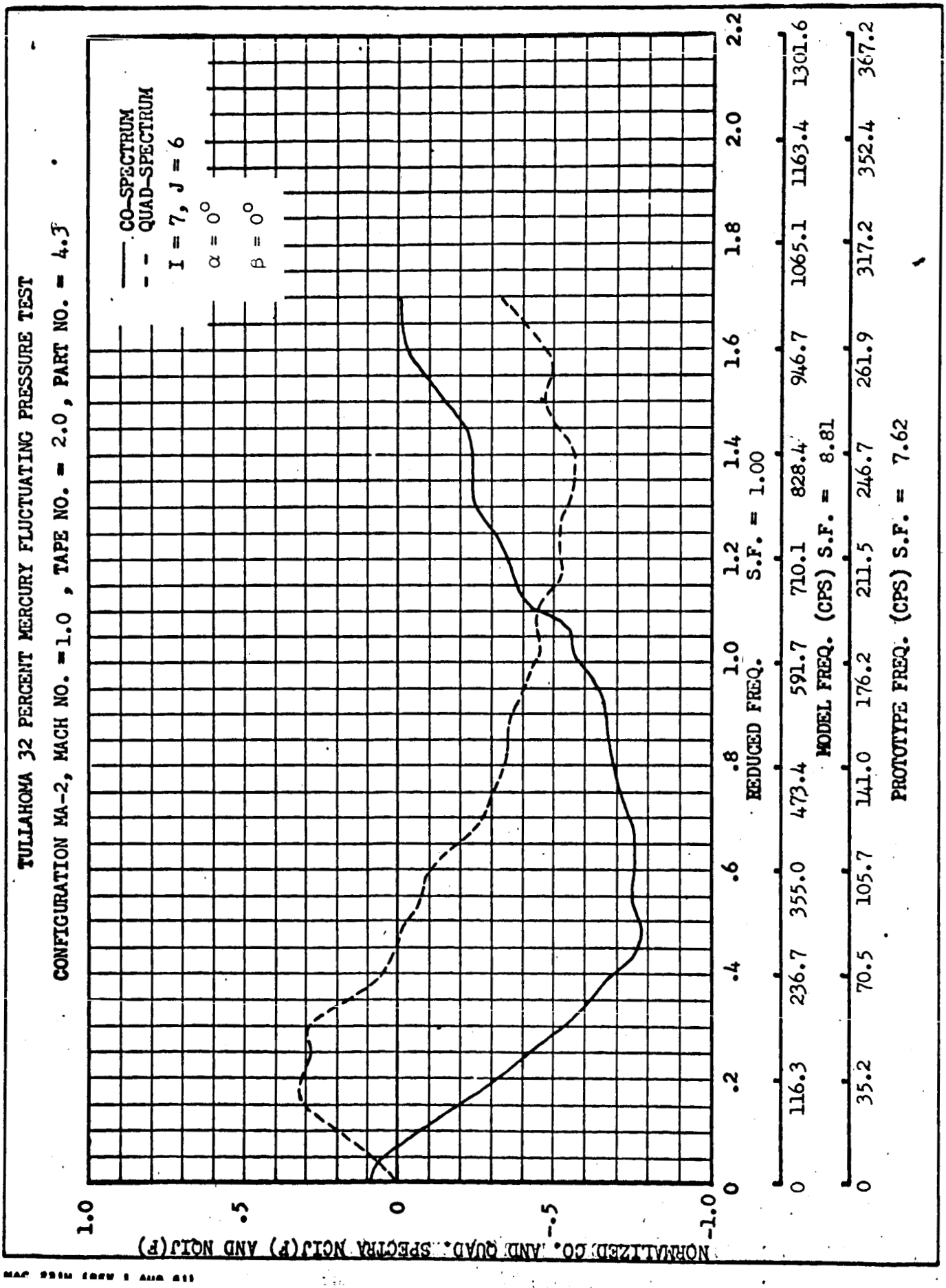
TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST

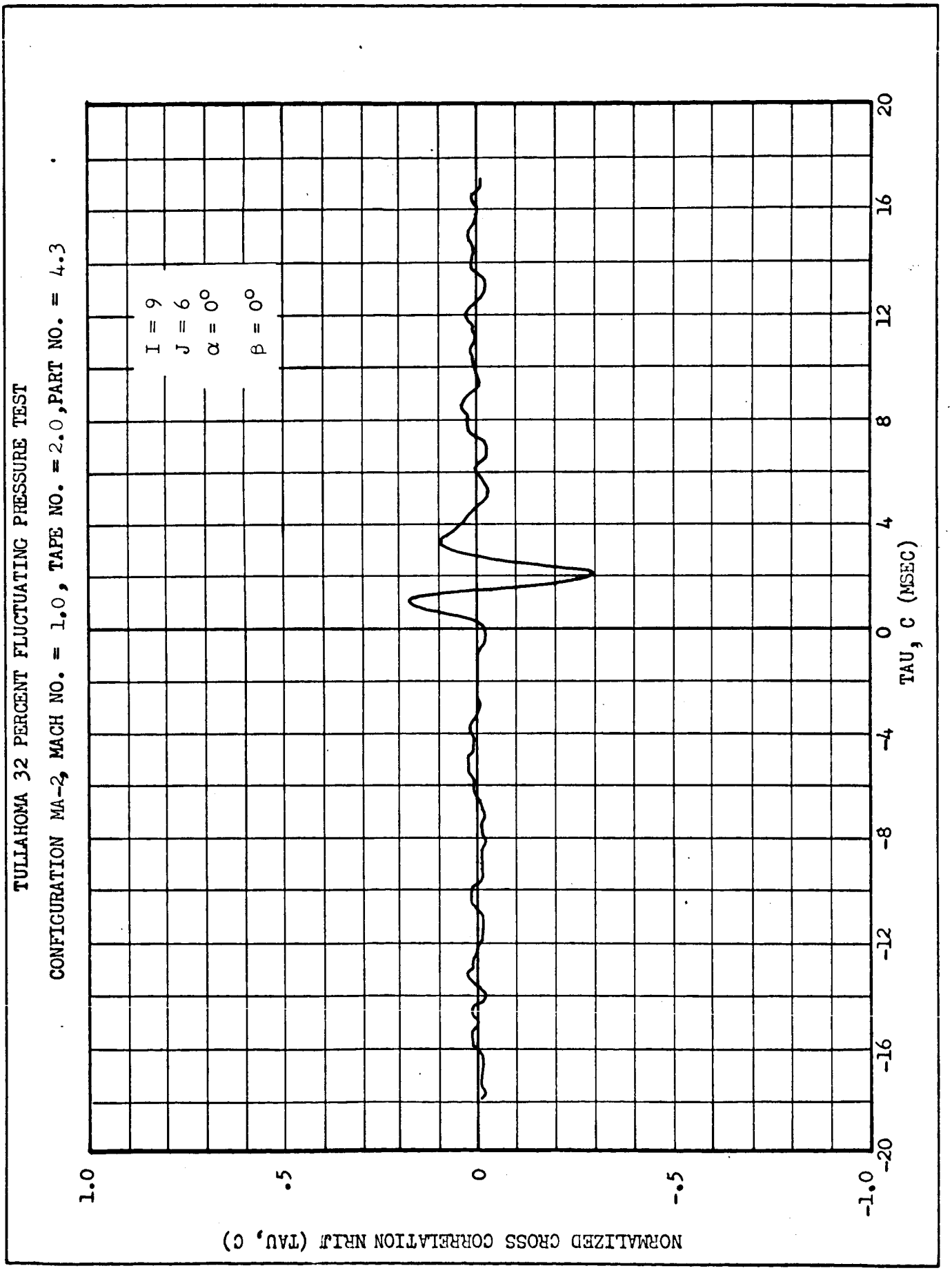
CONFIGURATION MA-2, MACH NO. = 1.0 , TAPE NO. = 2.0, PART NO. = 4.3

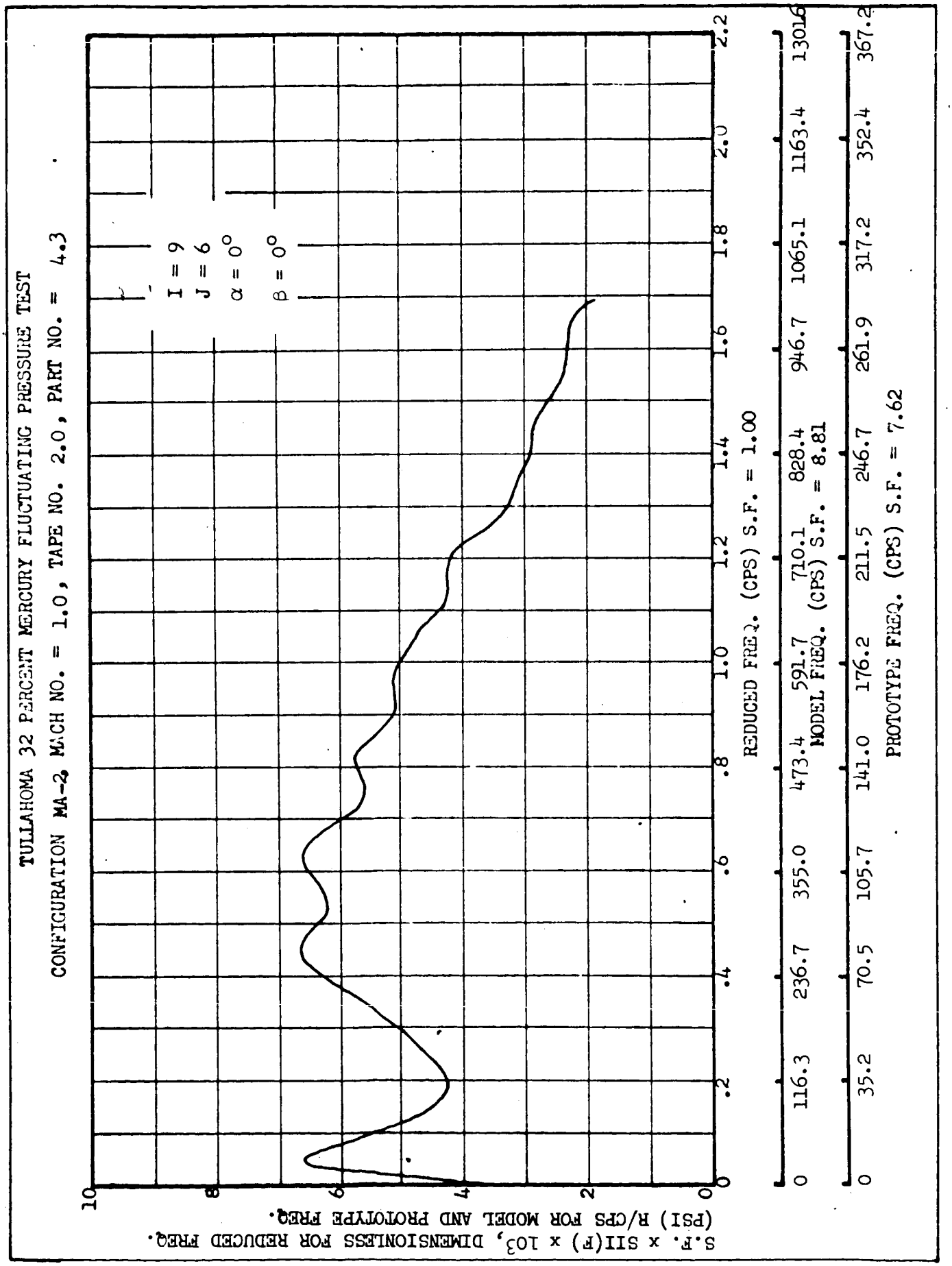



TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2 MACH NO. = 1.0 , TAPE NO. = 2.0 , PART NO. = 4.3
I = 7
J = 6
α = 0°
β = 0°
S.F. x SII (F) x 10², DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
0
1
2
3
4
5
0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.0
0
118.3
236.7
355.0
473.4
591.7
710.1
828.4
946.7
1065.1
1183.4
1301.6
MODEL FREQ. (CPS) S.F. = 8.81
0
35.2
70.5
105.7
141.0
176.2
211.5
246.7
281.9
317.2
352.4
367.2
PROTOTYPE FREQ. (CPS) S.F. = 7.62


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.0, TAPE NO. = 2.0 , PART NO. = 4.3
I = 7
J = 6
α = 0°
β = 0°
S.F. x SJJ(P) x 10², DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
0
1
2
3
4
5
0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.00
0
118.3
236.7
355.0
473.4
591.7
710.1
828.4
946.7
1065.1
1183.4
1301.6
MODEL FREQ. (CPS) S.F. = 8.81
0
35.2
70.5
105.7
141.0
176.2
211.5
246.7
281.9
317.2
352.4
367.2
PROTOTYPE FREQ. (CPS) S.F. = 7.62


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. =1.0 , TAPE NO. = 2.0 , PART NO. = 4.3
CO-SPECTRUM
QUAD-SPECTRUM
I = 7, J = 6
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA NOIJ(P) AND NOIJ(P)
1.0
.5
0
-.5
-1.0
0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.00
0
116.3
236.7
355.0
473.4
591.7
710.1
828.4
946.7
1065.1
1163.4
1301.6
MODEL FREQ. (CPS) S.F. = 8.81
0
35.2
70.5
105.7
141.0
176.2
211.5
246.7
261.9
317.2
352.4
367.2
PROTOTYPE FREQ. (CPS) S.F. = 7.62


TULIAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.0, TAPE NO. = 2.0, PART NO. = 4.3
I = 9
J = 6
α = 0°
β = 0°
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2 MACH NO. = 1.0, TAPE NO. 2.0, PART NO. = 4.3
I = 9
J = 6
α = 0°
β = 0°
S.F. x SII(F) x 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI) R/CPS FOR MODEL AND PROTOTYPE FREQ.
REDUCED FREQ. (CPS) S.F. = 1.00
MODEL FREQ. (CPS) S.F. = 8.81
PROTOTYPE FREQ. (CPS) S.F. = 7.62
0 .2 .4 .6 .8 1.0 1.2 1.4 1.6 1.8 2.0 2.2
0 2 4 6 8 10
0 116.3 236.7 355.0 473.4 591.7 710.1 828.4 946.7 1065.1 1163.4 1301.6
0 35.2 70.5 105.7 141.0 176.2 211.5 246.7 261.9 317.2 352.4 367.2

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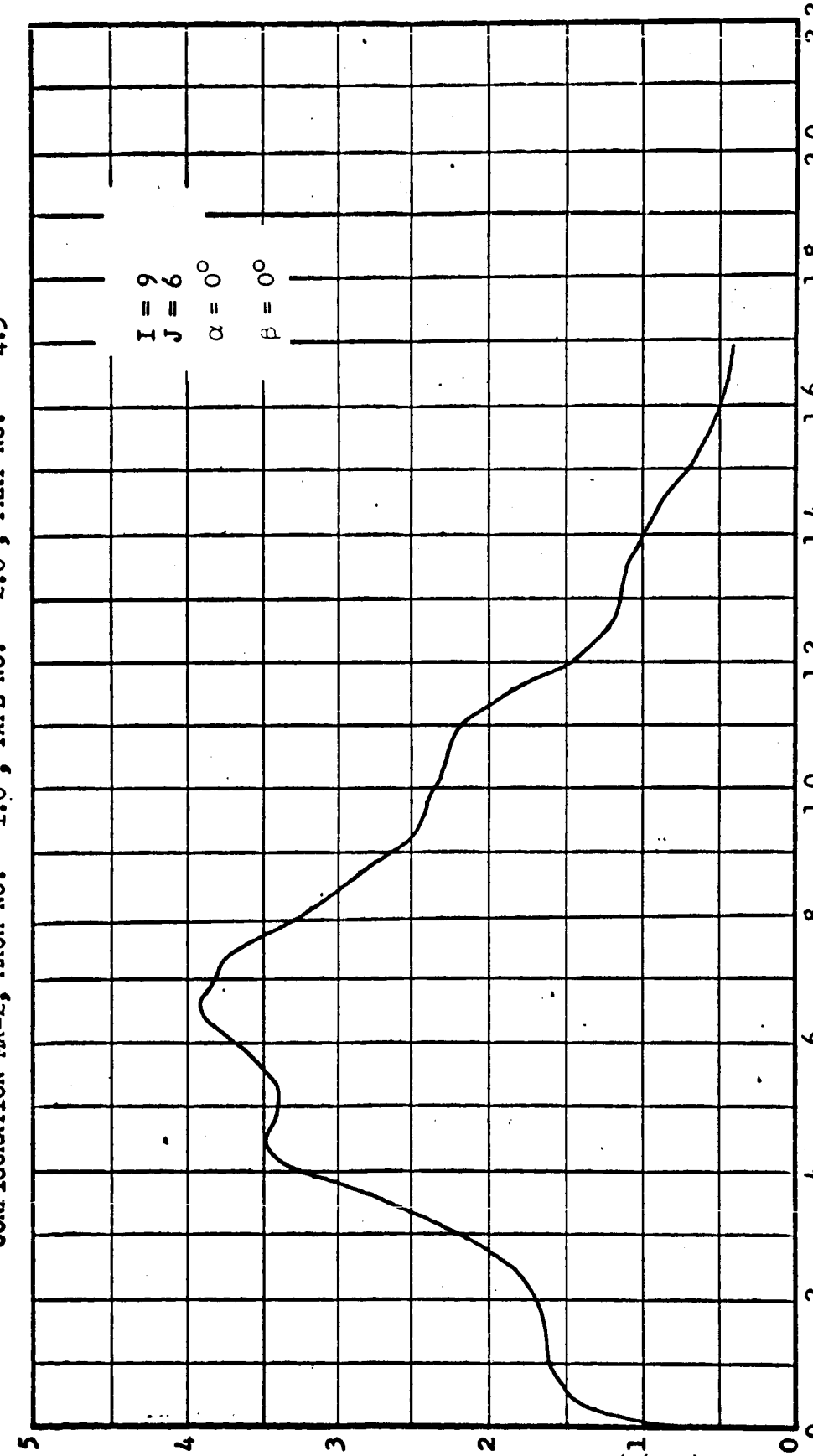
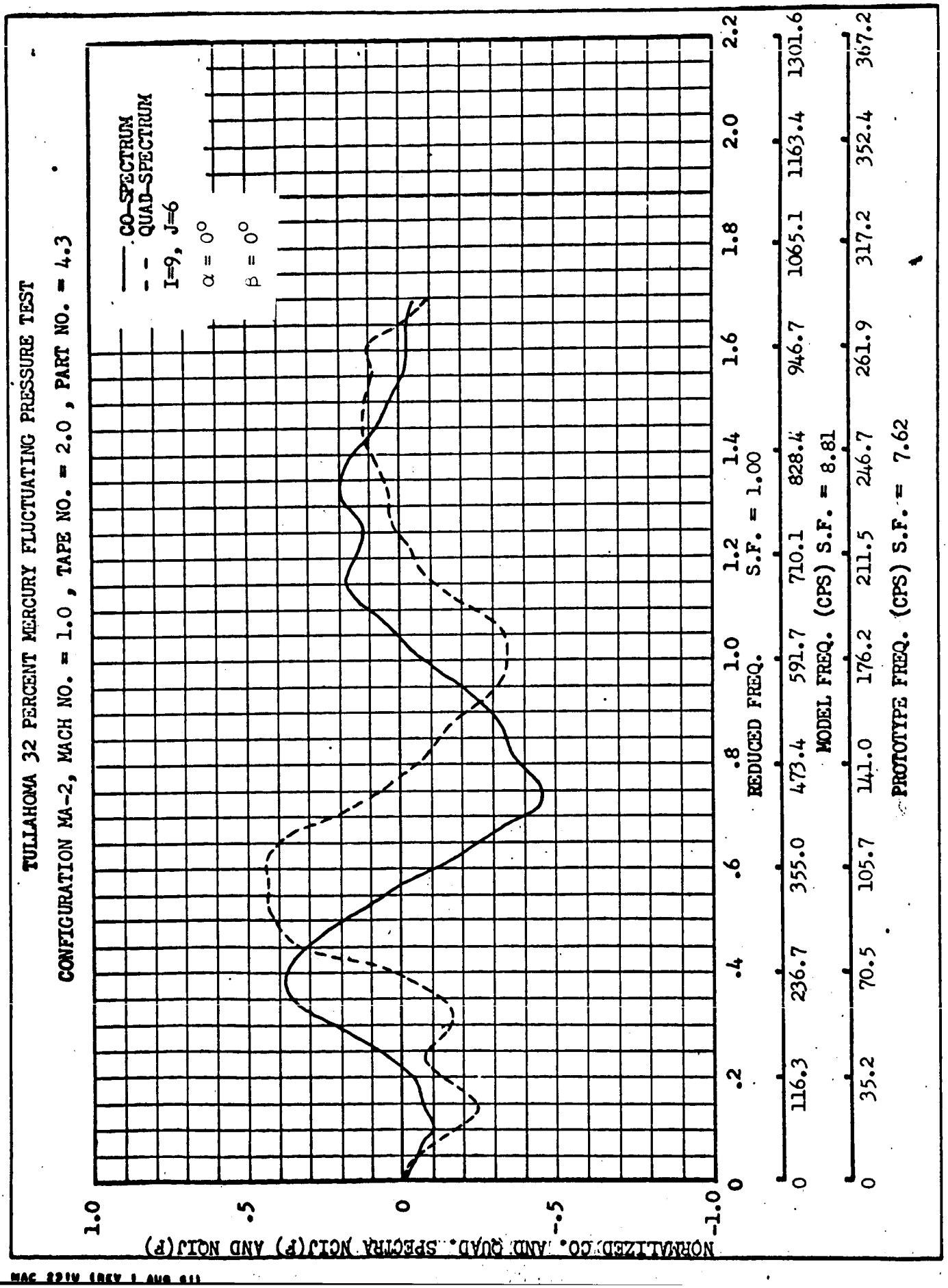
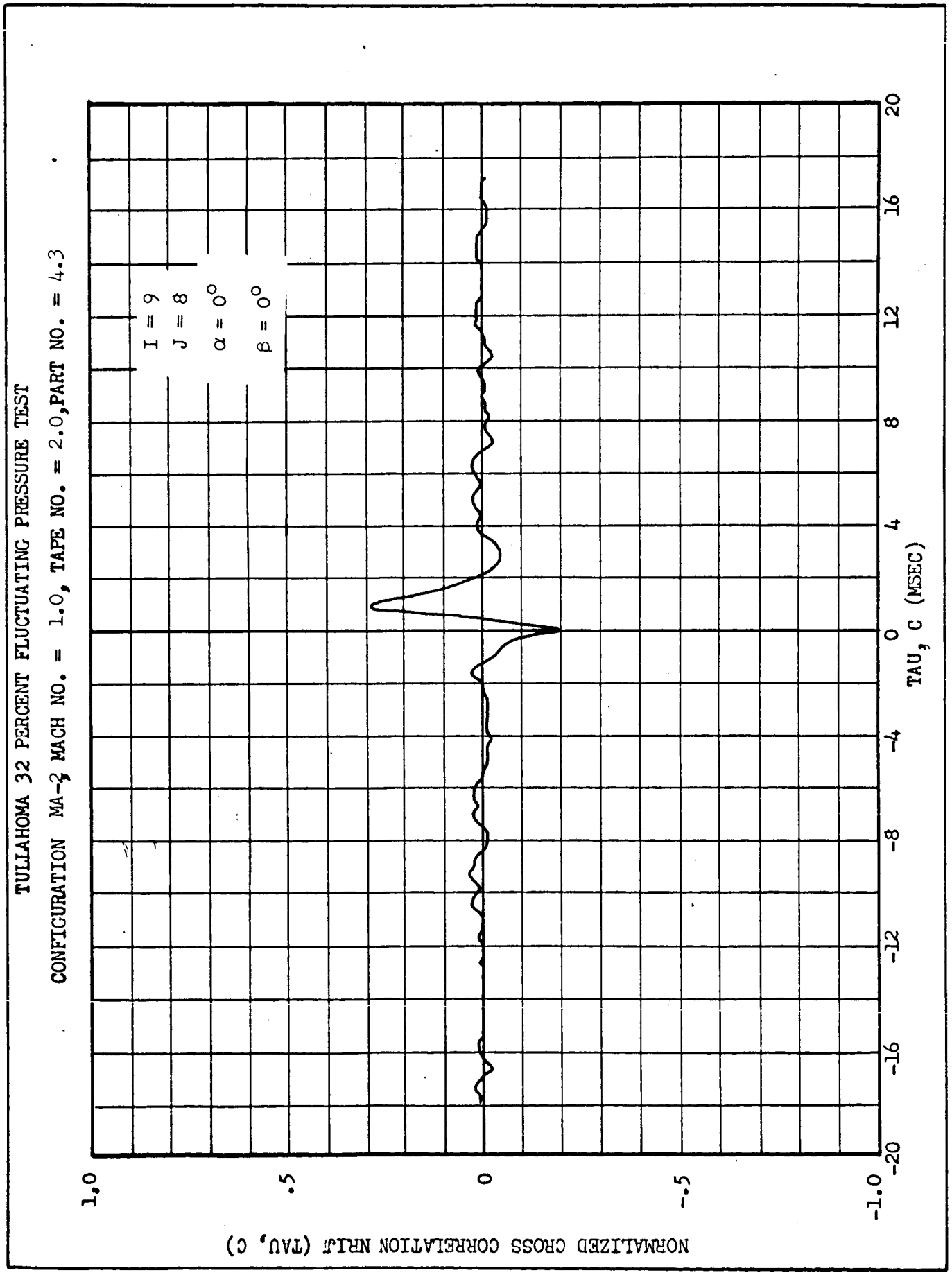
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

CONFIGURATION MA-2, MACH NO. = 1.0 , TAPE NO. = 2.0 , PART NO. = 4.3

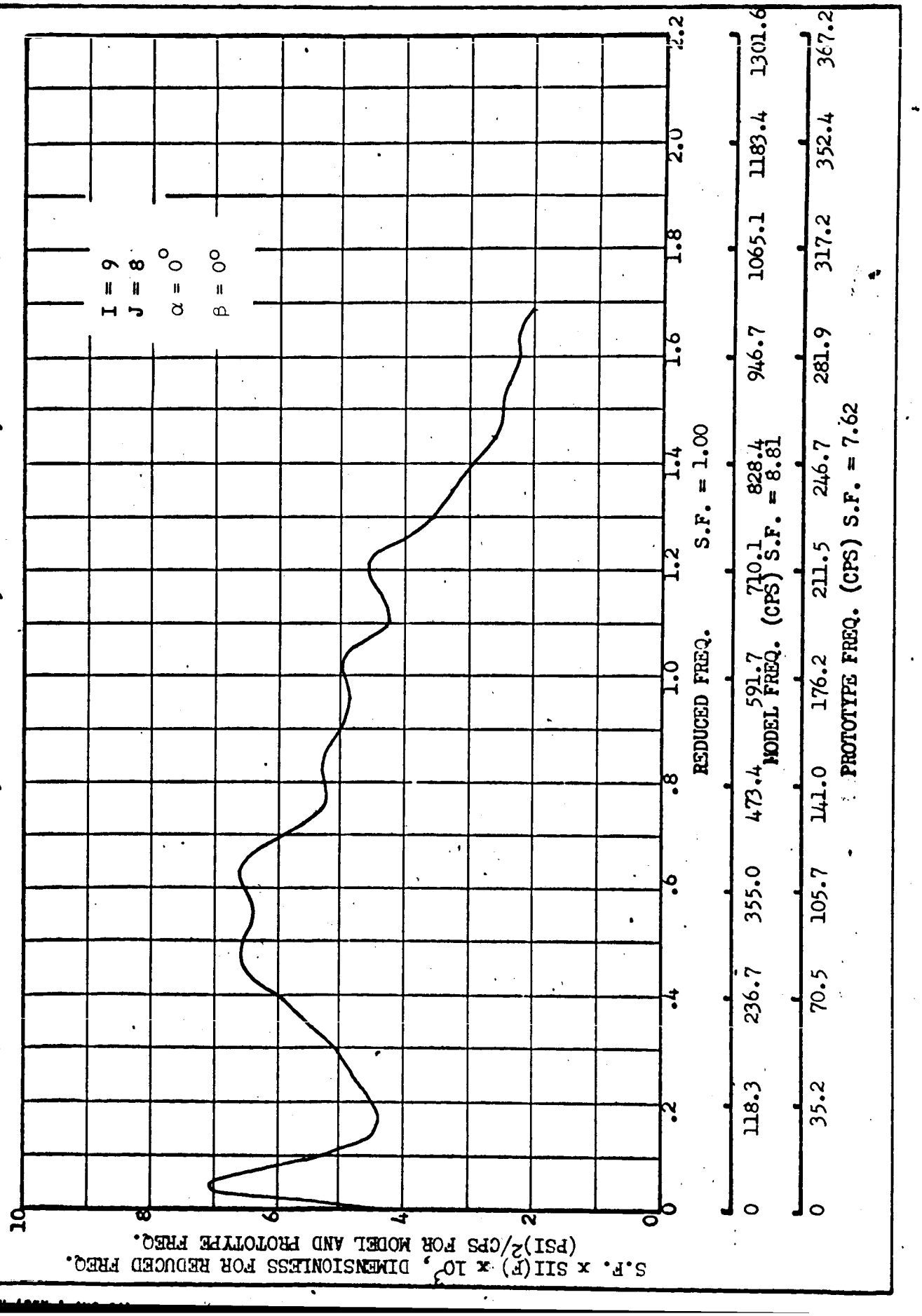


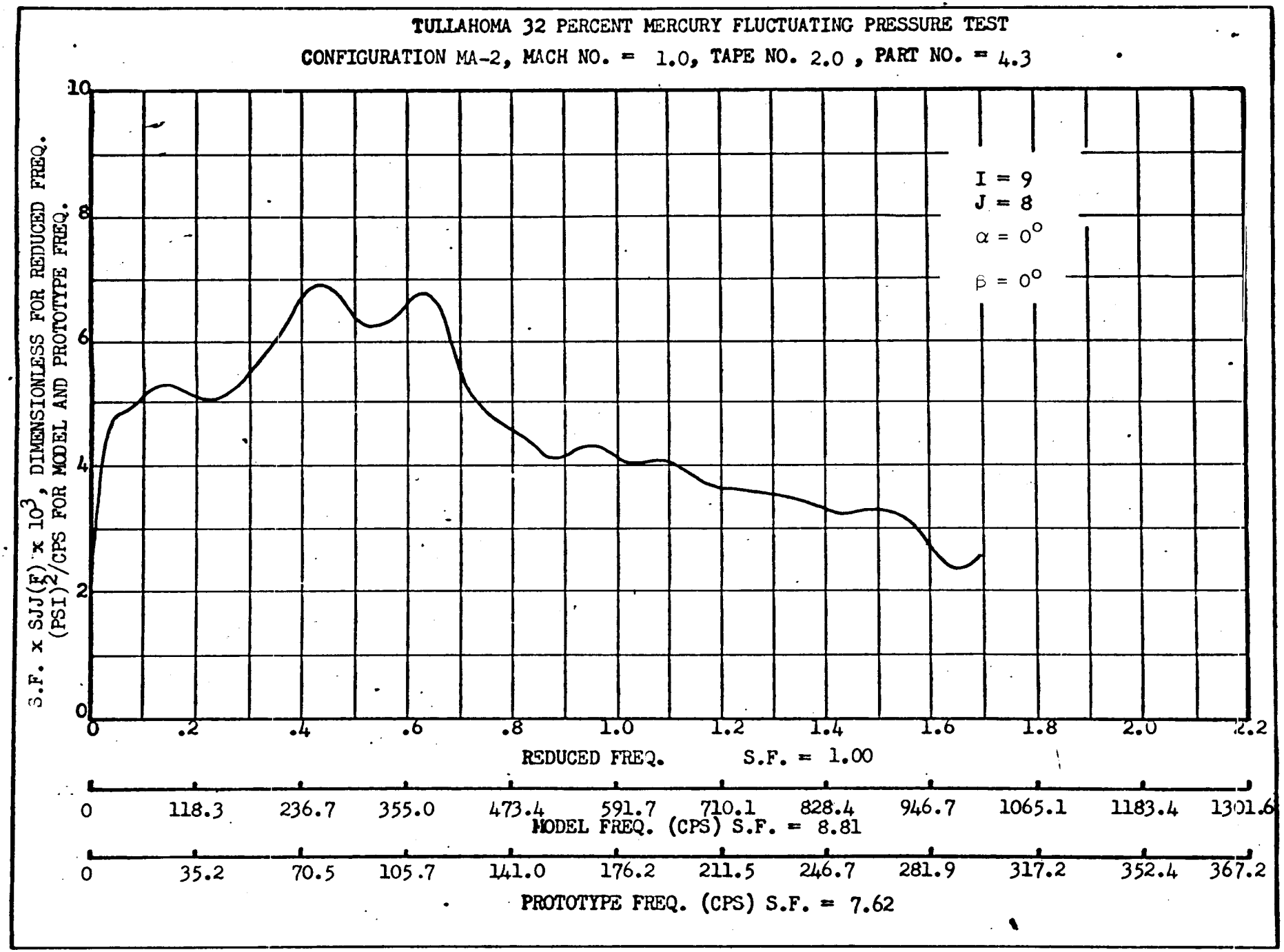

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.0 , TAPE NO. = 2.0 , PART NO. = 4.3
CO-SPECTRUM
QUAD-SPECTRUM
I=9, J=6
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA NOIJ(P) AND NOIJ(P)
1.0
.5
0
-.5
-1.0
0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.00
0
116.3
236.7
355.0
473.4
591.7
710.1
828.4
946.7
1065.1
1163.4
1301.6
MODEL FREQ. (CPS) S.F. = 8.81
0
35.2
70.5
105.7
141.0
176.2
211.5
246.7
261.9
317.2
352.4
367.2
PROTOTYPE FREQ. (CPS) S.F. = 7.62


TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2 MACH NO. = 1.0, TAPE NO. = 2.0, PART NO. = 4.3
I = 9
J = 8
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

CONFIGURATION MA-2, MACH NO. = 1.0 , TAPE NO. 2.0 , PART NO. = 4.3





DATE 30 April 1965
REVISED
REVISED
MODEL
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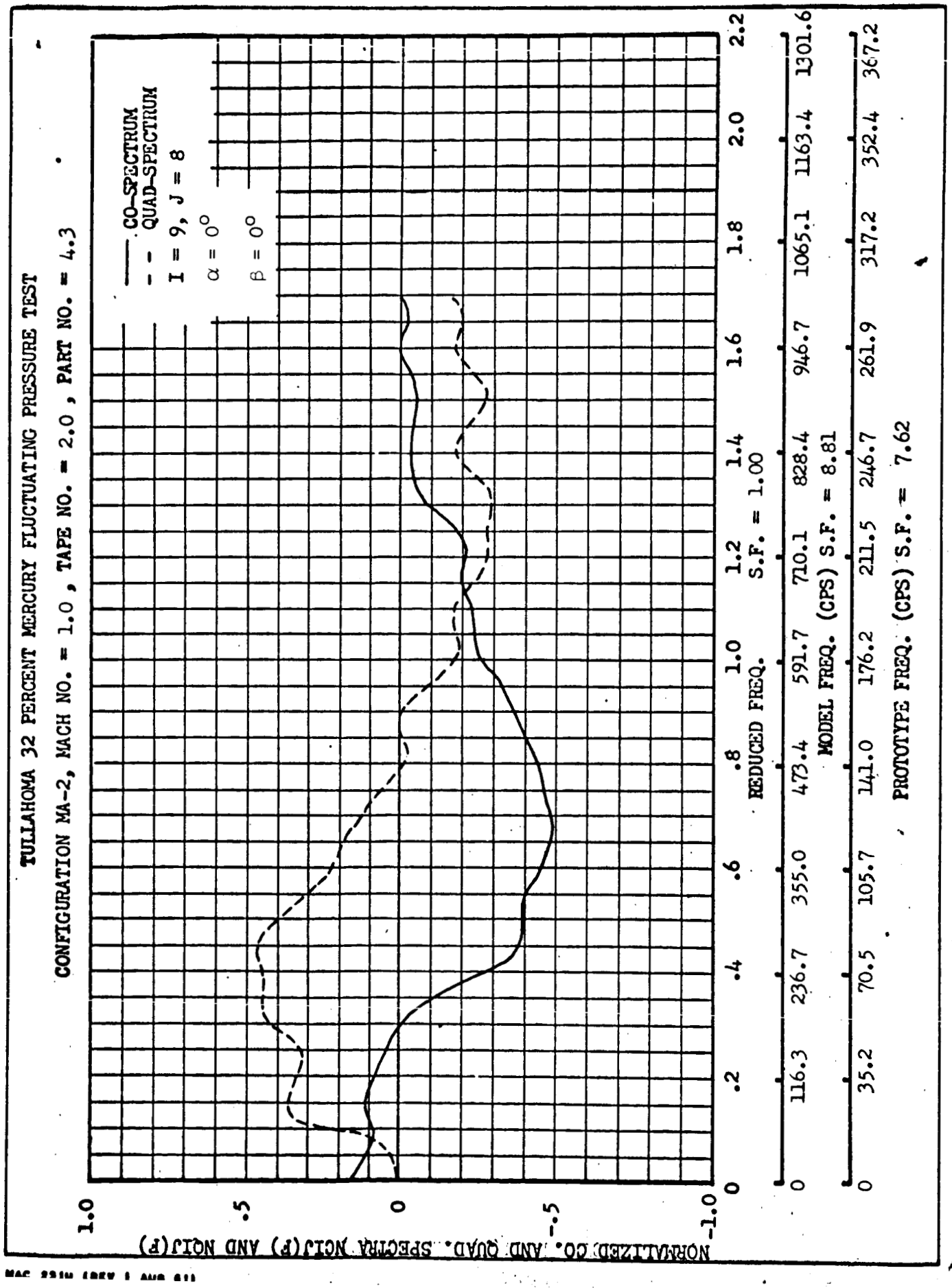
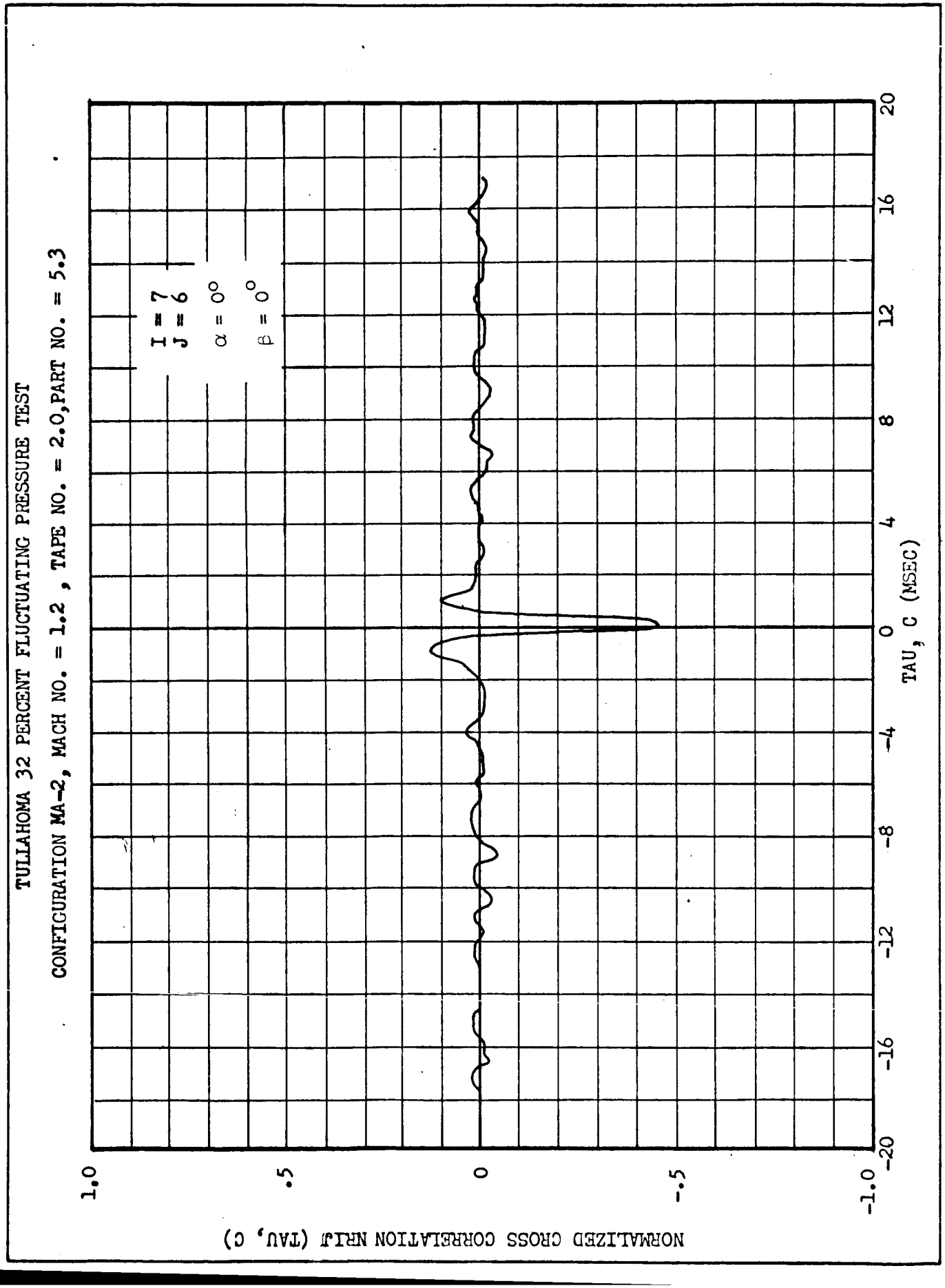
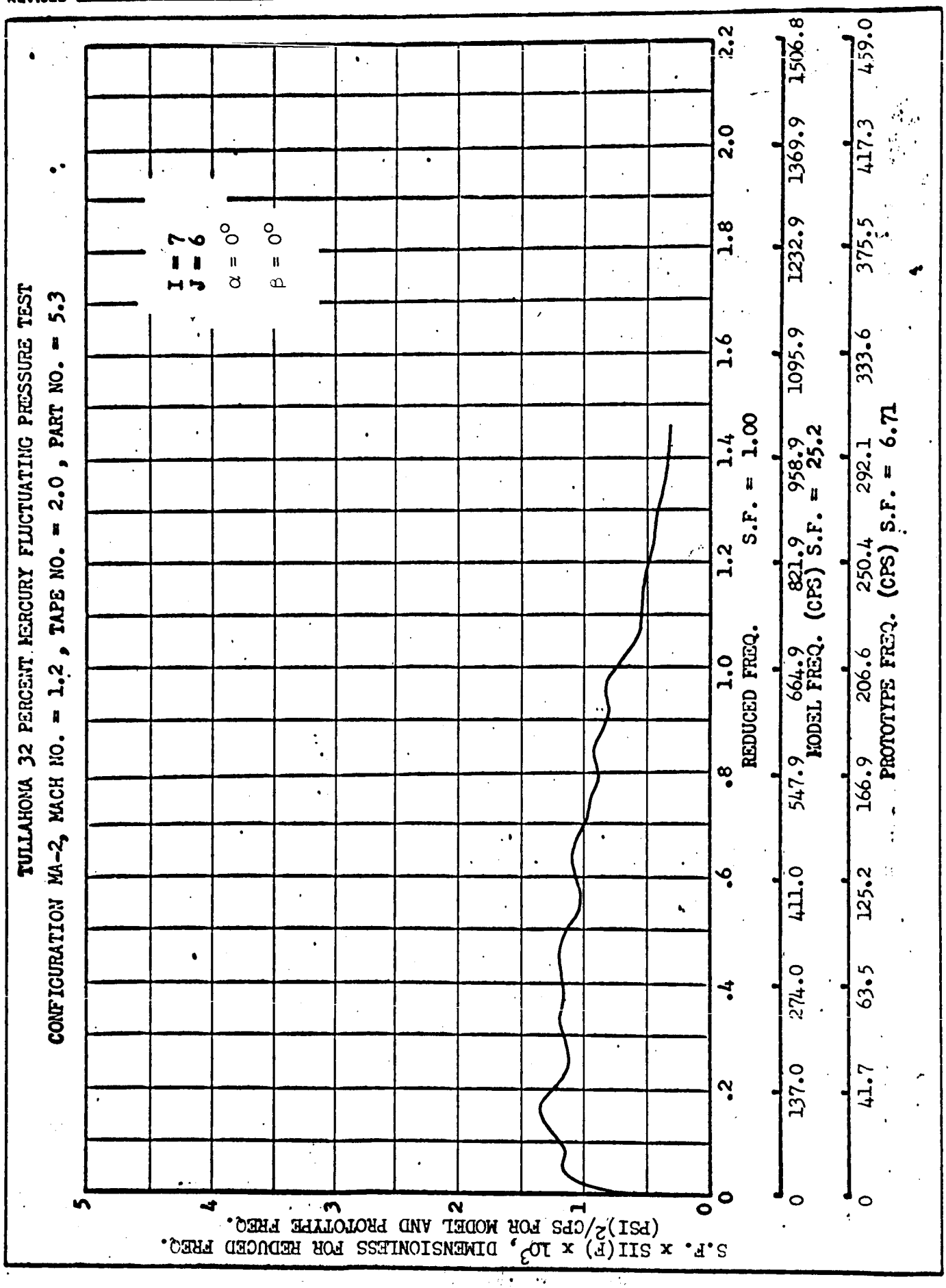
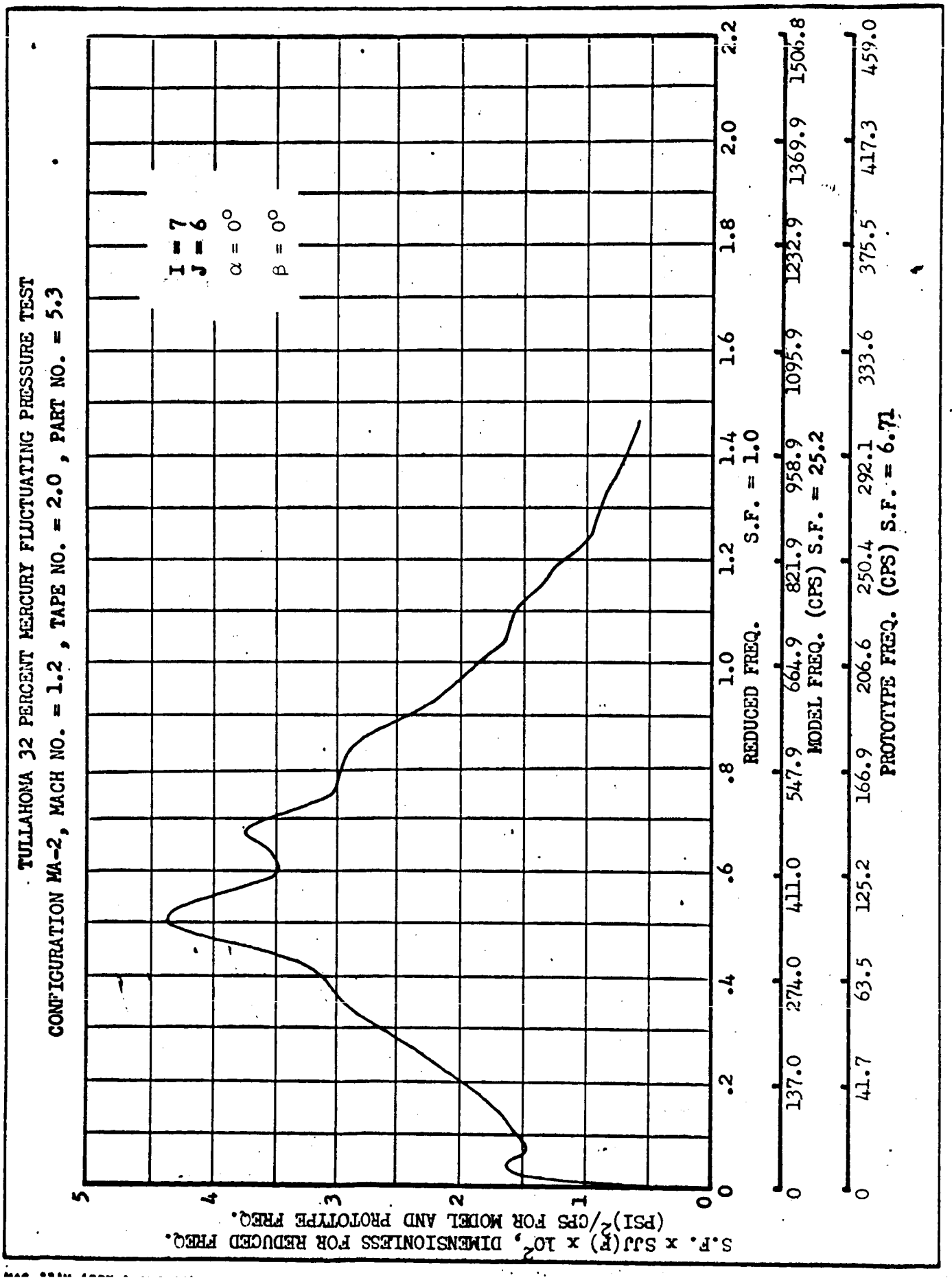
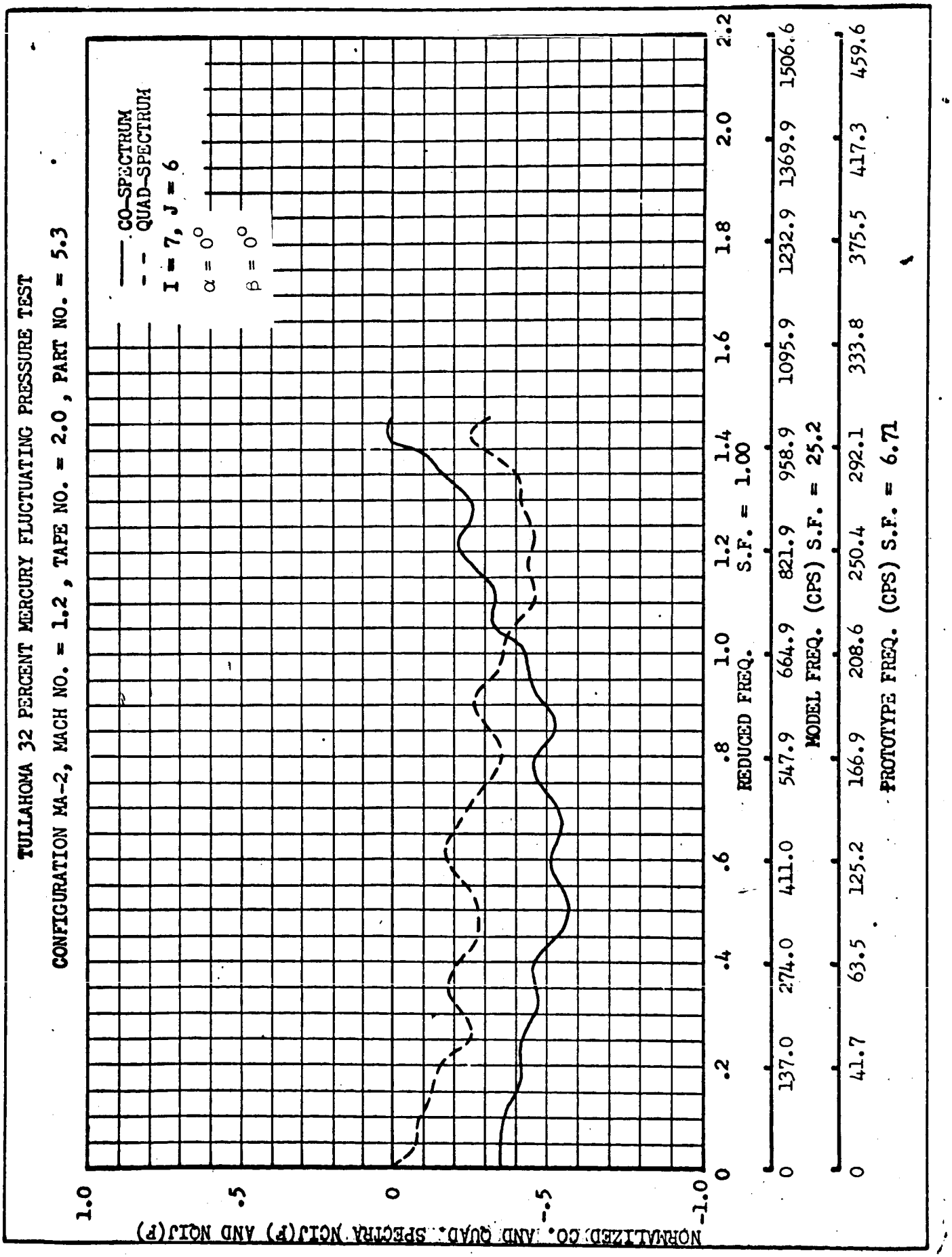
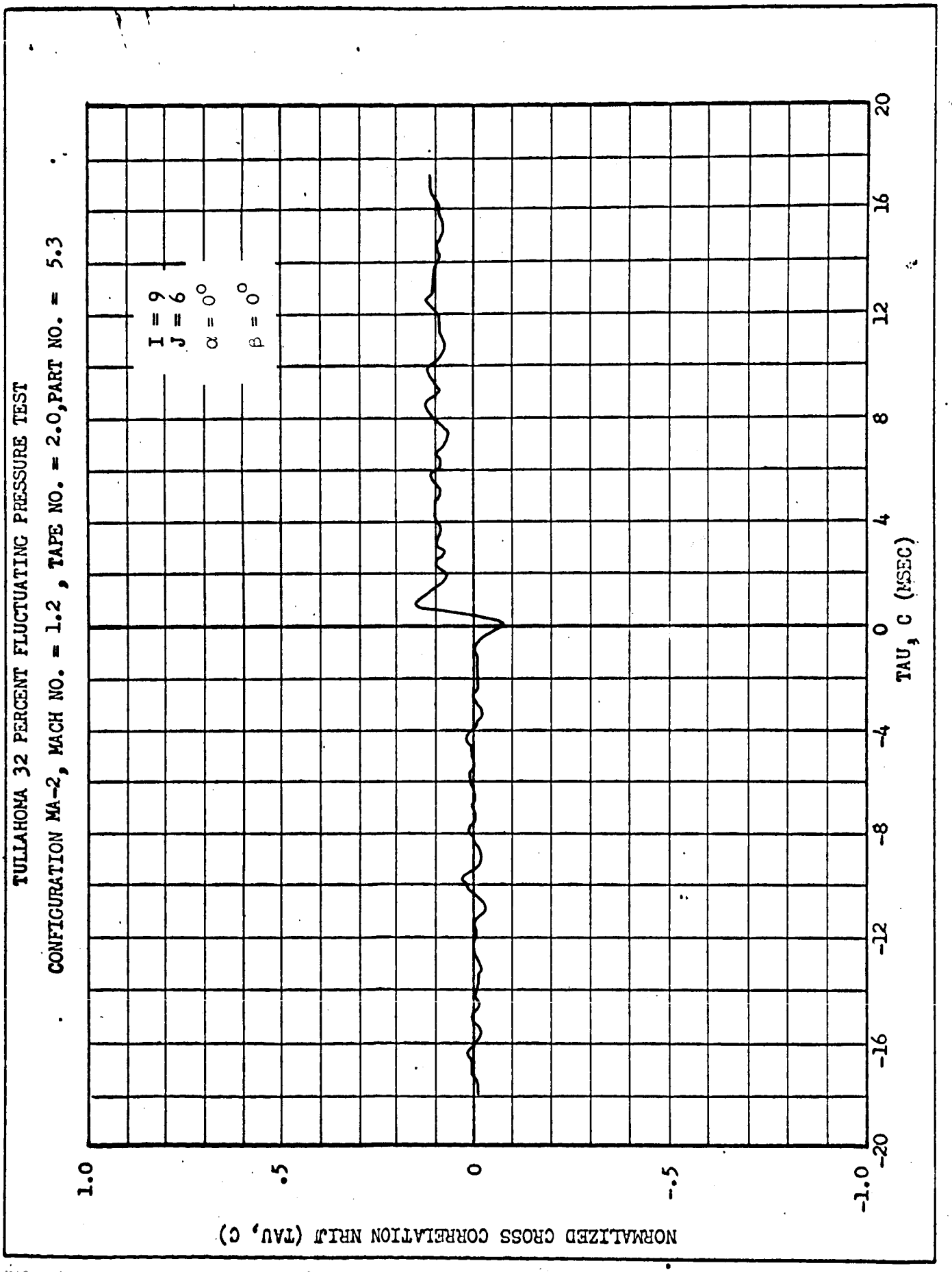

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.0 , TAPE NO. = 2.0 , PART NO. = 4.3
CO-SPECTRUM
QUAD-SPECTRUM
I = 9, J = 8
α = 0°
β = 0°
NORMALIZED CO. AND QUAD. SPECTRA NCIJ(P) AND NQIJ(P)
1.0
.5
0
-.5
-1.0
0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.00
0
116.3
236.7
355.0
473.4
591.7
710.1
828.4
946.7
1065.1
1163.4
1301.6
MODEL FREQ. (CPS) S.F. = 8.81
0
35.2
70.5
105.7
141.0
176.2
211.5
246.7
261.9
317.2
352.4
367.2
PROTOTYPE FREQ. (CPS) S.F. = 7.62

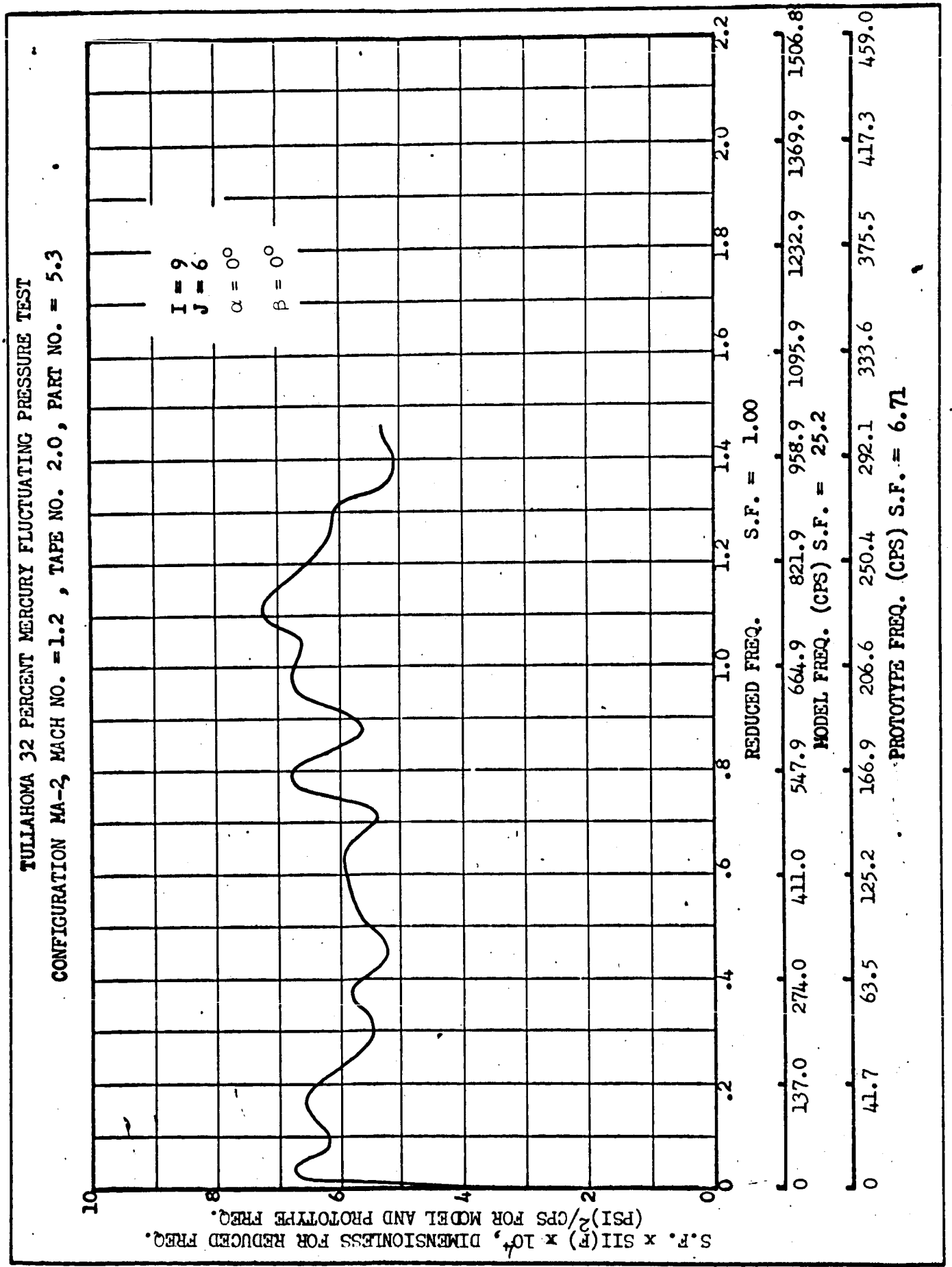

TULIAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0,PART NO. = 5.3
I = 7
J = 6
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRIJ (TAU, C)
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)

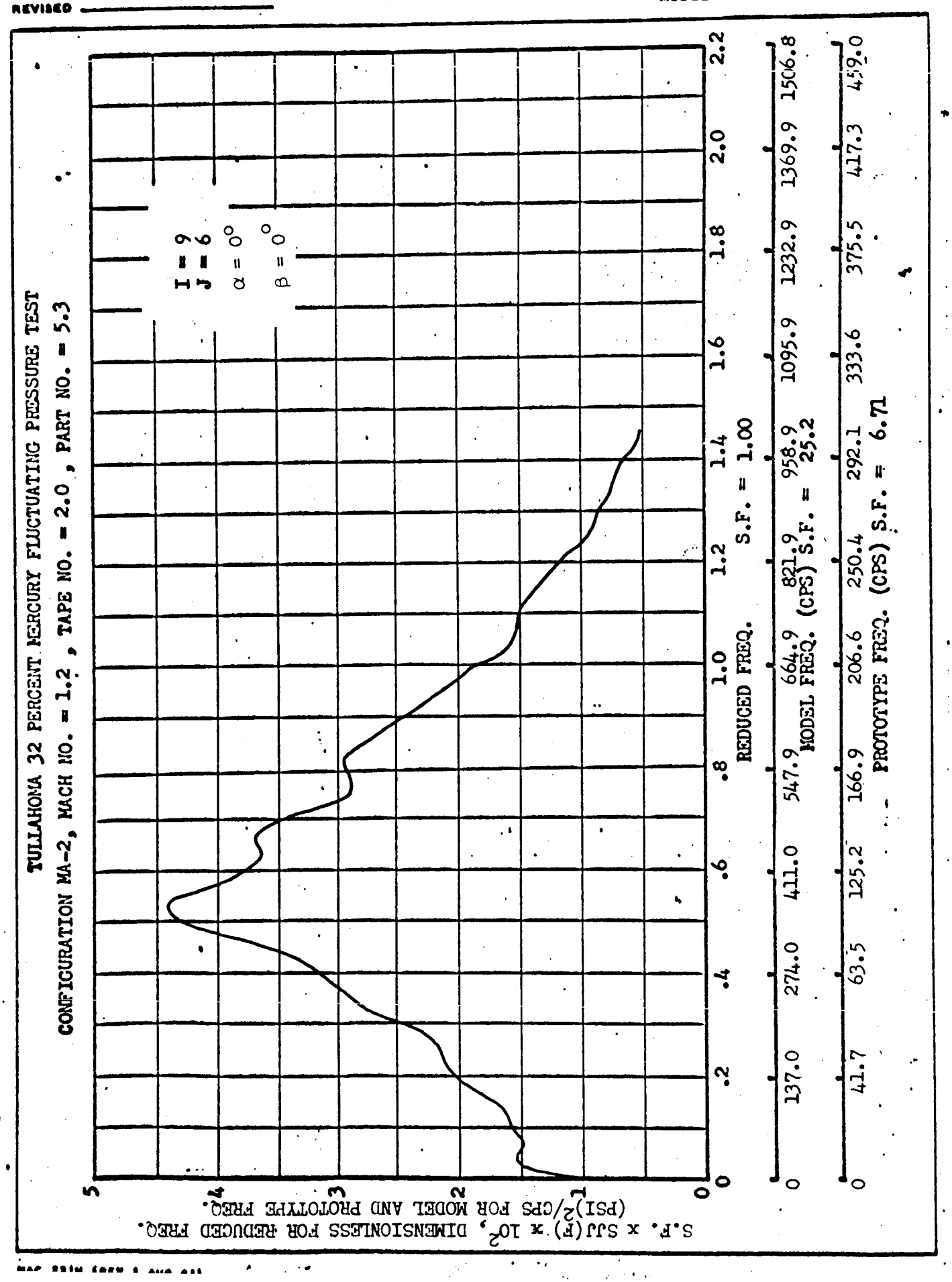

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0 , PART NO. = 5.3
I = 7
J = 6
α = 0°
β = 0°
S.F. x SII(F) x 10³, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
0
1
2
3
4
5
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.00
0
137.0
274.0
411.0
547.9
664.9
821.9
958.9
1095.9
1232.9
1369.9
1506.8
MODEL FREQ. (CPS) S.F. = 25.2
0
41.7
63.5
125.2
166.9
206.6
250.4
292.1
333.6
375.5
417.3
459.0
PROTOTYPE FREQ. (CPS) S.F. = 6.71

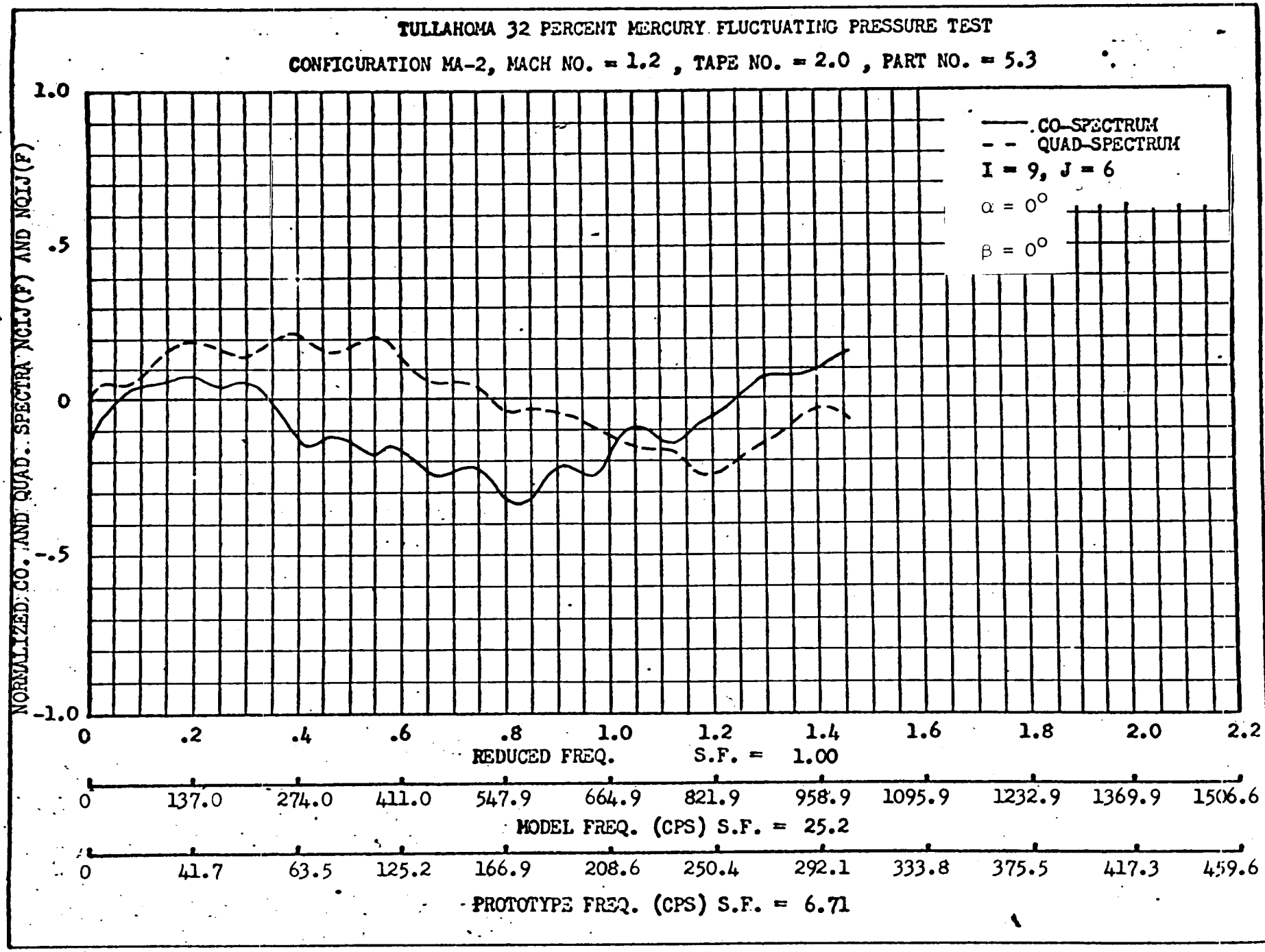

TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0 , PART NO. = 5.3
I = 7
J = 6
α = 0°
β = 0°
S.F. x SJJ(F) x 10², DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
0
1
2
3
4
5
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.0
0
137.0
274.0
411.0
547.9
664.9
821.9
958.9
1095.9
1232.9
1369.9
1505.8
MODEL FREQ. (CPS) S.F. = 25.2
0
41.7
63.5
125.2
166.9
206.6
250.4
292.1
333.6
375.5
417.3
459.0
PROTOTYPE FREQ. (CPS) S.F. = 6.71


TULAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0 , PART NO. = 5.3
CO-SPECTRUM
QUAD-SPECTRUM
I = 7, J = 6
α = 0°
β = 0°
NORMALIZED CO- AND QUAD- SPECTRA NCIJ(P) AND NQIJ(P)
1.0
.5
0
-.5
-1.0
0 .2 .4 .6 .8 1.0 1.2 1.4 1.6 1.8 2.0 2.2
REDUCED FREQ.
S.F. = 1.00
0 137.0 274.0 411.0 547.9 664.9 821.9 958.9 1095.9 1232.9 1369.9 1506.6
MODEL FREQ. (CPS) S.F. = 25.2
0 41.7 63.5 125.2 166.9 208.6 250.4 292.1 333.8 375.5 417.3 459.6
PROTOTYPE FREQ. (CPS) S.F. = 6.71


TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0,PART NO. = 5.3
I = 9
J = 6
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRLJ (TAU, C)
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. =1.2 , TAPE NO. 2.0, PART NO. = 5.3
I = 9
J = 6
α = 0°
β = 0°
S.F. x SII(F) x 10⁴, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
10
8
6
4
2
0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.00
0
137.0
274.0
411.0
547.9
664.9
821.9
958.9
1095.9
1232.9
1369.9
1506.8
MODEL FREQ. (CPS) S.F. = 25.2
0
41.7
63.5
125.2
166.9
206.6
250.4
292.1
333.6
375.5
417.3
459.0
PROTOTYPE FREQ. (CPS) S.F. = 6.71


TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0 , PART NO. = 5.3
I = 9
J = 6
α = 0°
β = 0°
S.F. x Sjj(F) x 10², DIMENSIONLESS FOR REDUCED FREQ.
(PSI)²/CPS FOR MODEL AND PROTOTYPE FREQ.
0
1
2
3
4
5
0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
REDUCED FREQ.
S.F. = 1.00
0
137.0
274.0
411.0
547.9
664.9
821.9
958.9
1095.9
1232.9
1369.9
1506.8
MODEL FREQ. (CPS) S.F. = 25.2
0
41.7
63.5
125.2
166.9
206.6
250.4
292.1
333.6
375.5
417.3
459.0
PROTOTYPE FREQ. (CPS) S.F. = 6.71



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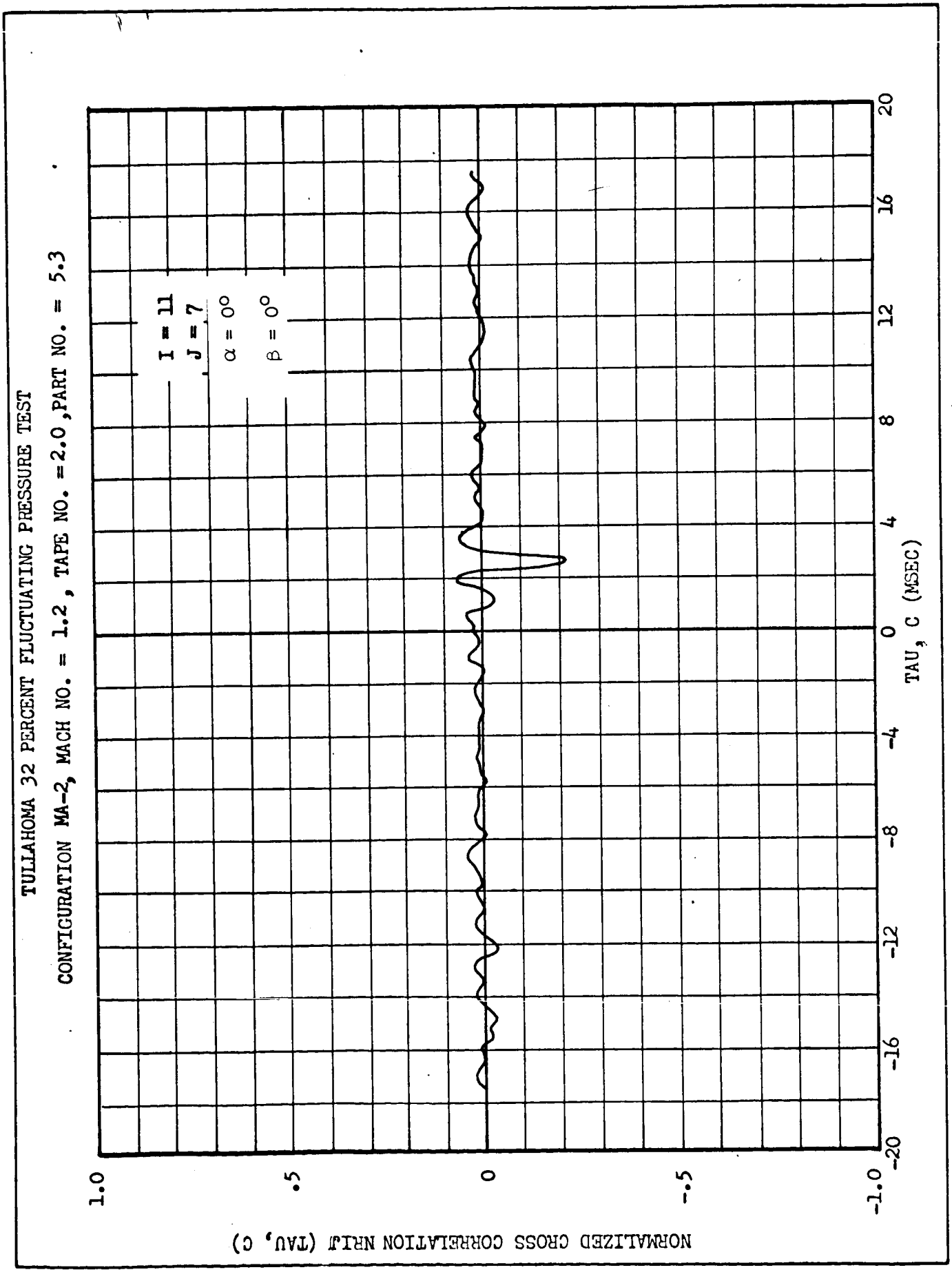
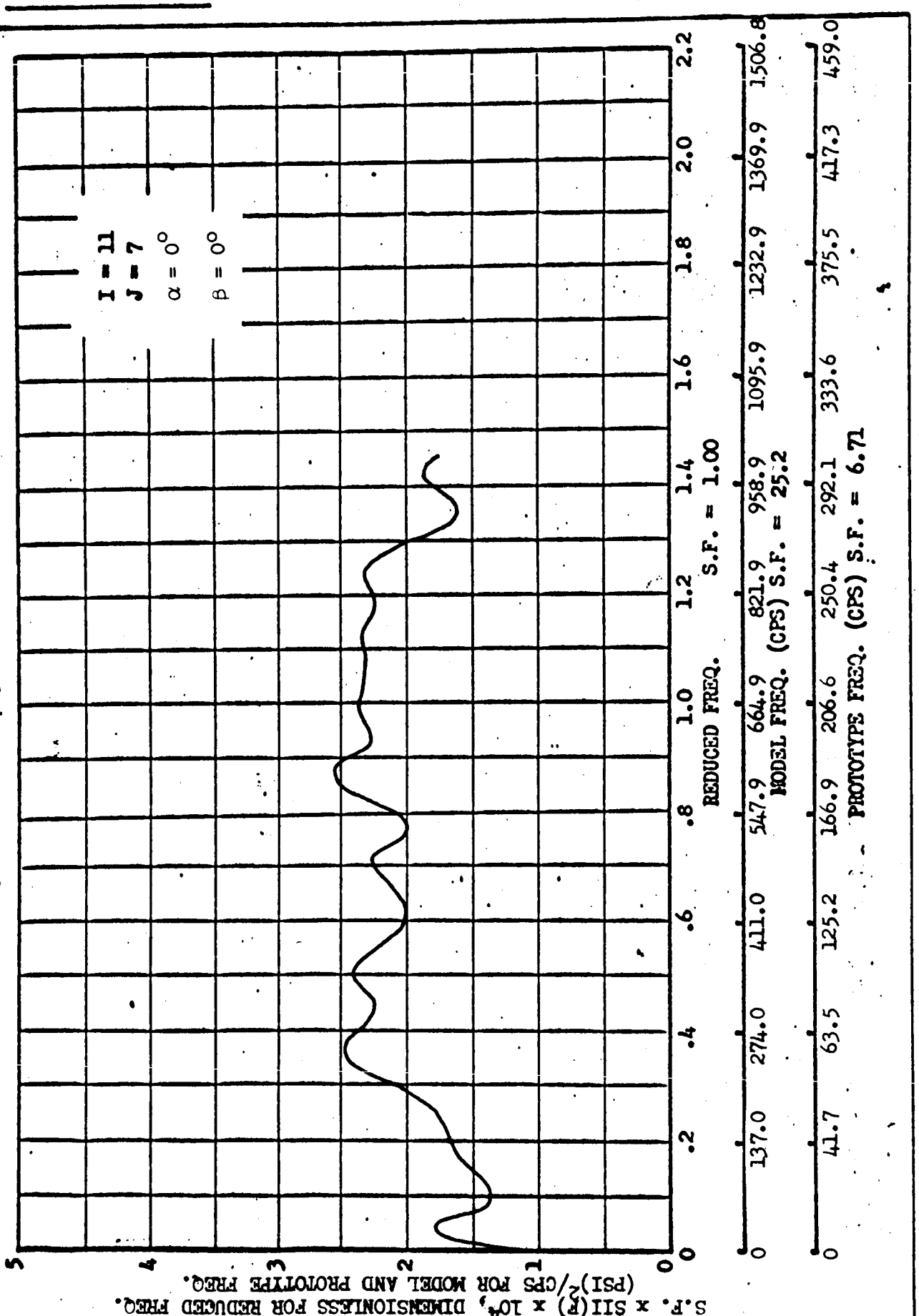

TULAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. =2.0 ,PART NO. = 5.3
I = 11
J = 7
α = 0°
β = 0°
NORMALIZED CROSS CORRELATION NRIJ (TAU, C)
1.0
.5
0
-.5
-1.0
20
16
12
8
4
0
-4
-8
-12
-16
-20
TAU, C (MSEC)

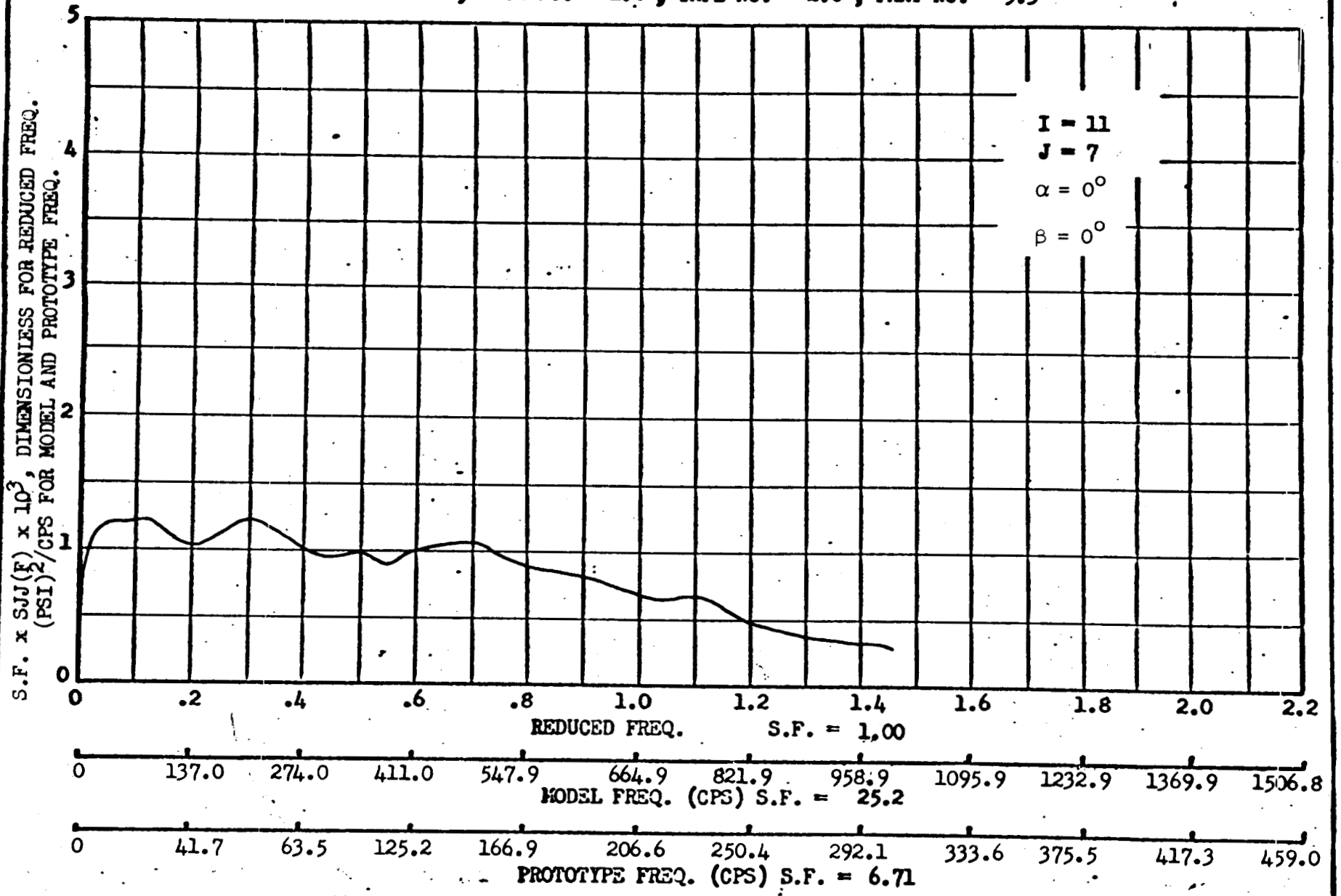
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0 , PART NO. = 5.3



TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0 , PART NO. = 5.3



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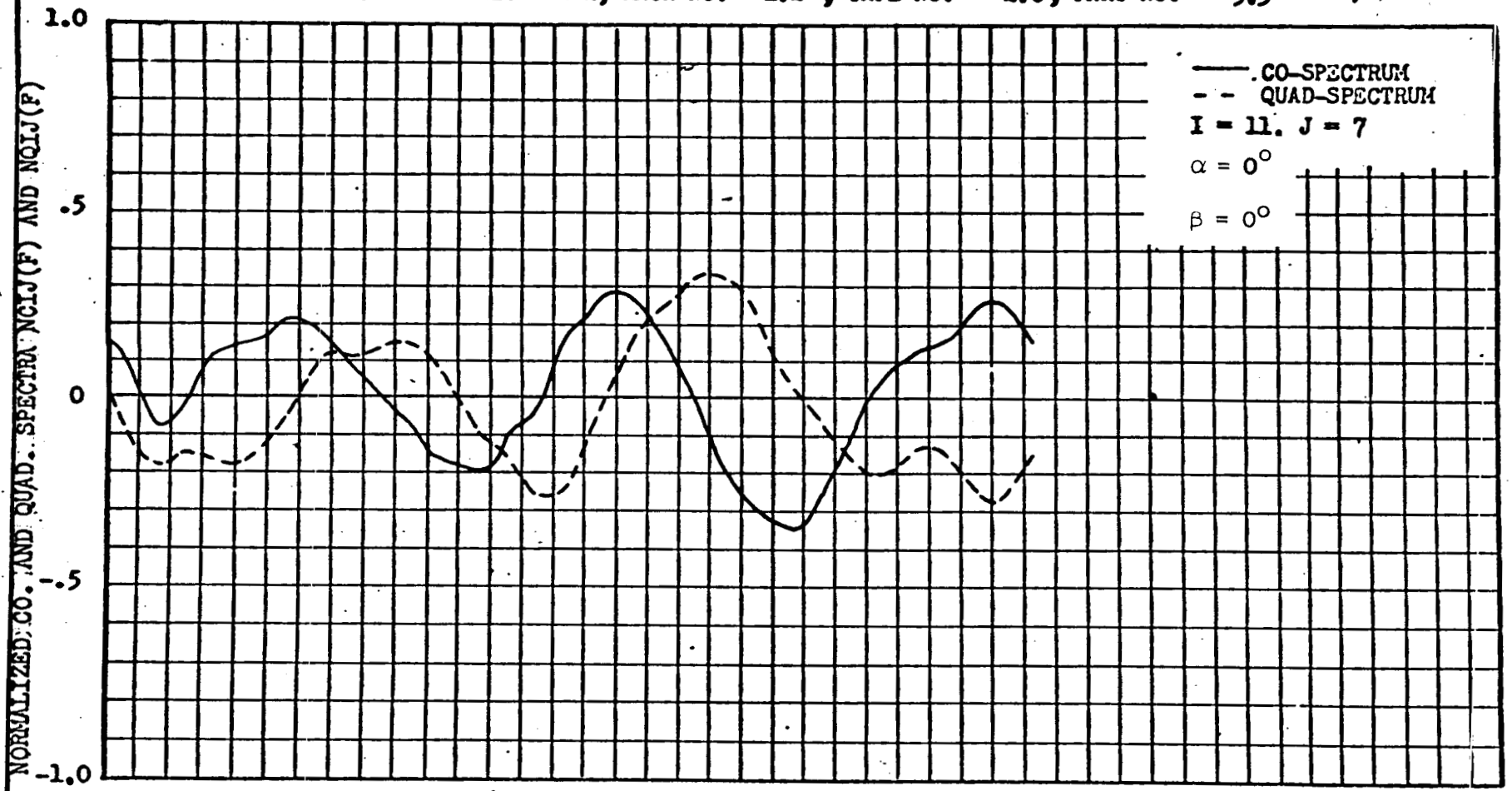
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

CONFIGURATION MA-2, MACH NO. = 1.2 , TAPE NO. = 2.0, PART NO. = 5.3



DATE 30 April 1965 REVISED REVISED

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CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$
CONFIG. MA-2

MACH NO.= 1.0 TAPE NO.= 2.0 PART NO.= 4.3 J= 6 I= 7
RJJ(0)= 2.5000E 00 RII(0)= 6.9331E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.00	0.01	1.71E 01	0.00	1.79E 01	0.01
69	1.72E 01	-0.01	0.01	1.68E 01	-0.02	1.77E 01	-0.00
68	1.70E 01	-0.01	0.01	1.66E 01	-0.03	1.74E 01	0.00
67	1.67E 01	-0.01	0.02	1.63E 01	-0.03	1.72E 01	0.01
66	1.65E 01	0.01	0.03	1.61E 01	-0.01	1.69E 01	0.01
65	1.62E 01	0.02	0.04	1.58E 01	-0.00	1.67E 01	0.01
64	1.60E 01	0.02	0.04	1.56E 01	0.00	1.64E 01	-0.00
63	1.57E 01	0.01	0.03	1.53E 01	0.01	1.62E 01	-0.01
62	1.55E 01	0.01	0.02	1.51E 01	0.01	1.59E 01	-0.01
61	1.52E 01	0.00	0.01	1.48E 01	0.01	1.57E 01	-0.02
60	1.50E 01	-0.00	0.01	1.46E 01	-0.00	1.54E 01	-0.01
59	1.47E 01	0.00	0.01	1.43E 01	-0.00	1.52E 01	0.00
58	1.45E 01	0.01	0.02	1.41E 01	0.00	1.49E 01	0.01
57	1.42E 01	0.01	0.03	1.38E 01	0.00	1.47E 01	0.01
56	1.40E 01	0.00	0.02	1.36E 01	0.00	1.44E 01	0.00
55	1.37E 01	-0.01	0.02	1.33E 01	0.01	1.42E 01	-0.01
54	1.35E 01	-0.02	0.02	1.31E 01	0.02	1.39E 01	0.00
53	1.32E 01	-0.02	0.02	1.28E 01	0.02	1.37E 01	0.02
52	1.30E 01	-0.01	0.02	1.26E 01	0.03	1.34E 01	0.03
51	1.27E 01	-0.01	0.01	1.23E 01	0.02	1.32E 01	0.02
50	1.25E 01	-0.00	0.02	1.21E 01	0.01	1.29E 01	0.01
49	1.22E 01	0.00	0.03	1.18E 01	0.01	1.27E 01	0.01
48	1.20E 01	0.01	0.04	1.16E 01	0.00	1.24E 01	0.00
47	1.17E 01	0.01	0.05	1.13E 01	-0.01	1.22E 01	-0.01
46	1.15E 01	0.01	0.05	1.11E 01	-0.01	1.19E 01	-0.01
45	1.12E 01	0.01	0.05	1.08E 01	-0.01	1.17E 01	-0.02
44	1.10E 01	0.01	0.04	1.06E 01	-0.01	1.14E 01	-0.02
43	1.07E 01	0.01	0.04	1.03E 01	-0.02	1.12E 01	-0.02
42	1.05E 01	0.00	0.04	1.01E 01	-0.01	1.09E 01	-0.01
41	1.02E 01	0.00	0.04	9.82E 00	-0.00	1.07E 01	0.00
40	10.00E 00	0.01	0.04	9.57E 00	0.01	1.04E 01	0.01
39	9.75E 00	0.01	0.03	9.32E 00	0.02	1.02E 01	0.01
38	9.50E 00	0.00	0.03	9.07E 00	0.01	9.93E 00	0.01
37	9.25E 00	-0.01	0.02	8.82E 00	0.01	9.68E 00	0.01
36	9.00E 00	-0.01	0.03	8.57E 00	0.01	9.43E 00	0.01
35	8.75E 00	-0.02	0.04	8.32E 00	0.01	9.18E 00	0.02
34	8.50E 00	-0.01	0.05	8.07E 00	0.01	8.93E 00	0.02

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$ MACH NO.= 1.0 TAPE NO.= 2.C PART NO.= 4.3 J= 6 I= 7
CONFIG. MA-2 RJJ(0)= 2.500CE CO RII(0)= 6.9331E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 0C	-0.01	0.05	7.82E CO	-0.00	8.68E 0C	0.C1
32	8.C0E 00	-0.02	0.06	7.57E 00	-0.02	8.43E 00	0.00
31	7.75E 0C	-0.01	0.06	7.32E 00	-0.01	8.18E 00	-0.01
30	7.5CE 00	0.01	0.07	7.07E 00	-0.01	7.93E 00	-0.C0
29	7.25E CC	0.03	0.08	6.82E 00	0.00	7.68E 00	0.C1
28	7.CCE CC	0.03	0.08	6.57E 00	0.02	7.43E 00	0.C0
27	6.75E 0C	0.02	0.07	6.32E 0C	0.03	7.18E 00	-0.02
26	6.5CE CC	0.00	0.06	6.07E 00	0.03	6.93E 00	-0.C2
25	6.25E 00	-0.01	0.06	5.82E 00	0.02	6.68E 00	-0.01
24	6.CCE CC	-0.03	0.06	5.57E 00	0.01	6.43E 00	0.C0
23	5.75E 0C	-0.03	0.07	5.32E 00	0.00	6.18E 00	0.C1
22	5.5CE 0C	-0.02	0.09	5.07E 00	0.00	5.93E 00	0.C2
21	5.25E 0C	-0.01	0.10	4.82E 00	0.00	5.68E 00	0.02
20	5.CCE CC	0.00	0.10	4.57E 00	0.01	5.43E 00	0.C2
19	4.75E 0C	0.01	0.10	4.32E 00	0.01	5.18E 00	0.01
18	4.5CE CC	0.01	0.10	4.07E 00	0.01	4.93E 00	0.C0
17	4.25E CC	0.01	0.11	3.82E 00	0.00	4.68E 00	-0.00
16	4.00E 00	0.02	0.11	3.57E 00	0.01	4.43E 00	-0.C0
15	3.75E CC	0.02	0.12	3.32E 00	0.02	4.18E 00	-C.C0
14	3.50E CC	0.01	0.12	3.07E 00	0.02	3.93E 00	-0.C1
13	3.25E 0C	-0.00	0.13	2.82E 00	0.03	3.68E 00	-0.C2
12	3.00E 00	-0.01	0.13	2.57E 00	0.03	3.43E 00	-0.C2
11	2.75E CC	0.00	0.13	2.32E 00	0.05	3.18E 00	-0.01
10	2.50E 00	0.01	0.14	2.07E 00	0.07	2.93E 00	0.01
9	2.25E 0C	0.00	0.16	1.82E CO	0.12	2.68E 00	0.01
8	2.00E 0C	-0.02	0.16	1.57E 00	0.19	2.43E 00	-0.C0
7	1.75E 0C	-0.06	0.16	1.32E 00	0.26	2.18E 00	-0.C1
6	1.5CE CC	-0.12	0.15	1.07E 00	0.29	1.93E 00	0.C0
5	1.25E 0C	-0.20	0.12	8.22E-01	0.17	1.68E 00	0.C2
4	10.00E-01	-0.23	0.13	5.72E-01	-0.14	1.43E 00	0.C5
3	7.5CE-01	-0.14	0.18	3.22E-01	-0.45	1.18E 00	0.C8
2	5.00E-01	0.16	0.32	7.20E-02	-0.48	9.28E-01	0.10
1	2.50E-01	0.70	0.71	-1.78E-01	-0.26	6.78E-01	0.C7
0	0.	1.00	1.00	-4.28E-01	-0.04	4.28E-01	-0.C4

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^\circ$, $\beta = 0^\circ$

CONFIG. MA-2 MACH NO.= 1.0 TAPE NO.= 2.C PART NO.= 4.3 J= 6 I= 7
MODEL FREQ., S.F.= 8.81 PROTOTYPE FREQ., S.F.= 7.62 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NCIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	0.	6.94E-03	1.40E-02	0.09	-0.	0.09	360.00
28.57	8.51	0.05	1.41E-02	2.20E-02	0.04	0.09	0.10	65.85
57.14	17.02	0.10	1.51E-02	1.30E-02	-0.07	0.20	0.21	108.30
85.71	25.53	0.14	1.65E-02	8.79E-03	-0.19	0.30	0.35	122.34
114.29	34.03	0.19	1.78E-02	7.10E-03	-0.31	0.31	0.44	134.41
142.86	42.54	0.24	1.99E-02	6.52E-03	-0.41	0.28	0.49	145.99
171.43	51.05	0.29	2.35E-02	6.47E-03	-0.52	0.25	0.58	154.20
200.00	59.56	0.34	2.63E-02	6.12E-03	-0.61	0.18	0.63	163.48
228.57	68.07	0.39	2.94E-02	6.25E-03	-0.68	0.06	0.68	175.12
257.14	76.58	0.43	3.52E-02	6.86E-03	-0.75	0.02	0.75	178.24
285.71	85.09	0.48	3.75E-02	6.43E-03	-0.77	-0.01	0.77	180.37
314.29	93.59	0.53	3.51E-02	5.68E-03	-0.75	-0.07	0.76	185.14
342.86	102.10	0.58	3.30E-02	5.88E-03	-0.76	-0.09	0.76	187.05
371.43	110.61	0.63	3.37E-02	6.28E-03	-0.76	-0.15	0.77	191.54
400.00	119.12	0.68	3.71E-02	6.28E-03	-0.74	-0.24	0.77	198.32
428.57	127.63	0.72	3.83E-02	6.05E-03	-0.72	-0.29	0.77	202.09
457.14	136.14	0.77	3.48E-02	5.52E-03	-0.70	-0.32	0.77	204.61
485.71	144.65	0.82	3.10E-02	5.25E-03	-0.68	-0.34	0.76	206.29
514.29	153.15	0.87	2.88E-02	5.15E-03	-0.67	-0.35	0.75	207.58
542.86	161.66	0.92	2.74E-02	4.94E-03	-0.65	-0.39	0.75	210.85
571.43	170.17	0.97	2.54E-02	4.87E-03	-0.62	-0.42	0.75	214.46
600.00	178.68	1.01	2.24E-02	4.51E-03	-0.57	-0.45	0.72	218.26
628.57	187.19	1.06	1.92E-02	3.72E-03	-0.50	-0.44	0.67	221.31
657.14	195.70	1.11	1.65E-02	3.18E-03	-0.42	-0.45	0.62	227.14
685.71	204.21	1.16	1.56E-02	3.19E-03	-0.38	-0.52	0.64	233.81
714.29	212.71	1.21	1.50E-02	3.05E-03	-0.35	-0.52	0.63	236.25
742.86	221.22	1.26	1.32E-02	2.70E-03	-0.30	-0.52	0.60	240.26
771.43	229.73	1.30	1.16E-02	2.53E-03	-0.26	-0.54	0.60	244.67
800.00	238.24	1.35	1.10E-02	2.47E-03	-0.24	-0.58	0.63	247.52
828.57	246.75	1.40	1.02E-02	2.33E-03	-0.24	-0.58	0.63	247.42
857.14	255.26	1.45	8.62E-03	2.10E-03	-0.22	-0.51	0.55	246.10
885.71	263.77	1.50	6.99E-03	1.99E-03	-0.16	-0.47	0.49	251.38
914.29	272.27	1.55	6.06E-03	1.97E-03	-0.09	-0.50	0.51	260.10
942.86	280.78	1.59	5.46E-03	1.86E-03	-0.03	-0.49	0.49	266.77
971.43	289.29	1.64	4.86E-03	1.73E-03	-0.01	-0.41	0.41	269.19
1000.00	297.80	1.69	4.15E-03	1.55E-03	-0.01	-0.33	0.33	268.45

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$ MACH NO.= 1.0 TAPE NO.= 2.0 PART NO.= 4.3 J= 6 I= 9
CONFIG. MA-2 RJJ(0)= 2.5375E CC RII(0)= 6.0075E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	-0.00	-0.01	1.71E 01	-0.01	1.79E 01	-0.01
69	1.72E 01	-0.01	-0.01	1.68E 01	-0.01	1.77E 01	-0.02
68	1.70E 01	-0.00	-0.01	1.66E 01	0.01	1.74E 01	-0.01
67	1.67E 01	0.00	-0.01	1.63E 01	0.01	1.72E 01	-0.01
66	1.65E 01	0.00	-0.01	1.61E 01	-0.00	1.69E 01	-0.01
65	1.62E 01	0.01	0.00	1.58E 01	-0.00	1.67E 01	-0.02
64	1.60E 01	0.01	0.01	1.56E 01	0.00	1.64E 01	-0.02
63	1.57E 01	0.01	0.01	1.53E 01	0.01	1.62E 01	-0.01
62	1.55E 01	0.01	0.01	1.51E 01	0.02	1.59E 01	0.01
61	1.52E 01	0.00	-0.00	1.48E 01	0.02	1.57E 01	0.01
60	1.50E 01	-0.01	-0.01	1.46E 01	0.01	1.54E 01	0.01
59	1.47E 01	-0.02	-0.01	1.43E 01	0.01	1.52E 01	0.00
58	1.45E 01	-0.02	0.02	1.41E 01	0.01	1.49E 01	0.00
57	1.42E 01	-0.01	0.04	1.38E 01	0.02	1.47E 01	0.01
56	1.40E 01	0.00	0.02	1.36E 01	0.00	1.44E 01	0.01
55	1.37E 01	0.01	-0.00	1.33E 01	-0.02	1.42E 01	-0.01
54	1.35E 01	0.01	-0.01	1.31E 01	-0.02	1.39E 01	-0.02
53	1.32E 01	-0.00	-0.01	1.28E 01	-0.02	1.37E 01	-0.01
52	1.30E 01	-0.01	-0.01	1.26E 01	-0.01	1.34E 01	0.01
51	1.27E 01	-0.02	0.01	1.23E 01	0.01	1.32E 01	0.02
50	1.25E 01	-0.02	0.01	1.21E 01	0.02	1.29E 01	0.01
49	1.22E 01	-0.00	-0.00	1.18E 01	0.02	1.27E 01	0.01
48	1.20E 01	0.01	-0.01	1.16E 01	0.01	1.24E 01	0.00
47	1.17E 01	0.01	0.00	1.13E 01	0.01	1.22E 01	-0.00
46	1.15E 01	0.01	0.01	1.11E 01	0.00	1.19E 01	-0.01
45	1.12E 01	0.01	-0.00	1.08E 01	0.01	1.17E 01	-0.01
44	1.10E 01	0.00	-0.00	1.06E 01	0.02	1.14E 01	-0.01
43	1.07E 01	-0.00	0.00	1.03E 01	0.01	1.12E 01	-0.01
42	1.05E 01	-0.00	0.01	1.01E 01	0.01	1.09E 01	-0.01
41	1.02E 01	-0.00	0.01	9.83E 00	-0.00	1.07E 01	0.00
40	10.00E 00	-0.01	0.01	9.58E 00	-0.01	1.04E 01	0.02
39	9.75E 00	-0.01	-0.00	9.33E 00	-0.01	1.02E 01	0.02
38	9.50E 00	-0.01	-0.01	9.08E 00	0.01	9.92E 00	0.01
37	9.25E 00	-0.00	-0.01	8.83E 00	0.03	9.67E 00	-0.00
36	9.00E 00	0.00	-0.01	8.58E 00	0.04	9.42E 00	-0.01
35	8.75E 00	0.01	-0.00	8.33E 00	0.03	9.17E 00	-0.01
34	8.50E 00	0.01	0.01	8.08E 00	0.02	8.92E 00	-0.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$ MACH NO.= 1.0 TAPE NO.= 2.0 PART NO.= 4.3 J= 6 I= 9
CONFIG. MA-2 RJJ(0)= 2.5375E CC RII(0)= 6.0075E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 0C	0.00	0.02	7.83E CC	0.02	8.67E 00	-0.C1
32	8.00E 0C	0.00	0.02	7.58E 00	0.02	8.42E 00	-0.01
31	7.75E CC	0.01	0.01	7.33E 00	-0.00	8.17E 00	-0.02
30	7.5CE CC	0.01	0.01	7.08E 00	-0.02	7.92E 00	-C.C1
29	7.25E 0C	-0.01	0.01	6.83E 00	-0.03	7.67E 00	-0.01
28	7.CCE 0C	-0.02	0.01	6.58E CC	-0.03	7.42E 00	0.00
27	6.75E CC	-0.02	-0.00	6.33E 00	-0.01	7.17E 00	C.C1
26	6.5CE CC	-0.C1	-0.00	6.08E 00	0.00	6.92E 00	0.C1
25	6.25E 0C	-0.01	0.01	5.83E 00	-0.01	6.67E 00	0.00
24	6.CCE 00	-0.01	0.01	5.58E 00	-0.02	6.42E 00	0.C0
23	5.75E 0C	-0.02	0.01	5.33E 00	-0.03	6.17E 00	0.01
22	5.5CE CC	-0.02	0.02	5.C8E 00	-0.03	5.92E 00	0.C1
21	5.25E 0C	-0.01	0.02	4.83E 00	-0.01	5.67E 00	C.01
20	5.00E 0C	0.02	0.02	4.58E 0C	0.01	5.42E 00	0.C2
19	4.75E CC	0.04	0.02	4.33E 00	0.03	5.17E 00	0.02
18	4.5CE CC	0.03	0.03	4.C8E 00	0.04	4.92E 00	0.C2
17	4.25E CC	0.02	0.03	3.83E 00	0.07	4.67E 00	0.01
16	4.CCE 0C	0.00	0.03	3.58E 00	0.08	4.42E 00	0.C1
15	3.75E CC	-0.00	0.03	3.33E 00	0.09	4.17E 00	0.01
14	3.5CE 0C	0.00	0.04	3.08E 0C	0.07	3.92E 00	0.C2
13	3.25E CC	0.01	0.04	2.83E C0	0.00	3.67E 00	0.02
12	3.C0E CC	0.02	0.04	2.58E 00	-0.11	3.42E 00	0.C1
11	2.75E C0	0.02	0.03	2.33E 00	-0.24	3.17E 00	0.C0
10	2.5CE 0C	0.01	0.02	2.C8E 00	-0.29	2.92E 00	-0.C1
9	2.25E 0C	0.00	0.01	1.83E 00	-0.21	2.67E 00	-0.00
8	2.CCE 0C	-0.03	-0.00	1.58E 00	-0.04	2.42E 00	0.C0
7	1.75E CC	-0.06	-0.01	1.33E 00	0.12	2.17E 00	0.C0
6	1.5CE CC	-0.11	-0.01	1.08E 00	0.17	1.92E 00	-0.C0
5	1.25E 0C	-0.20	-0.06	8.28E-01	0.13	1.67E 00	-0.00
4	10.CCE-01	-0.24	-C.07	5.78E-01	0.06	1.42E 00	-0.C0
3	7.5CE-C1	-0.16	-0.06	3.28E-01	0.00	1.17E 00	0.C0
2	5.CCE-01	0.16	0.08	7.80E-02	-0.02	9.22E-01	-0.C0
1	2.50E-01	0.6S	0.61	-1.72E-01	-0.02	6.72E-01	-0.01
0	0.	1.0C	1.00	-4.22E-01	-0.02	4.22E-01	-0.C2

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$
CONFIG. MA-2 MACH NO.= 1.0 TAPE NO.= 2.0 PART NO.= 4.3 J= 6 I= 9
MODEL FREQ., S.F.= 8.81 PROTOTYPE FREQ., S.F.= 7.62 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NCIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	C.	6.94E-03	3.57E-03	-0.01	0.	0.01	180.00
28.57	8.51	0.05	1.47E-02	6.55E-03	-0.06	-0.06	0.09	227.13
57.14	17.02	C.10	1.56E-02	5.43E-03	-0.10	-0.18	0.21	241.70
85.71	25.53	0.14	1.60E-02	4.56E-03	-0.08	-0.24	0.25	251.88
114.29	34.03	C.19	1.66E-02	4.31E-03	-0.04	-0.14	0.15	254.68
142.86	42.54	C.24	1.79E-02	4.56E-03	0.05	-0.09	0.10	296.76
171.43	51.05	C.29	2.15E-02	4.97E-03	0.20	-0.15	0.25	323.04
200.00	59.56	C.34	2.67E-02	5.56E-03	0.34	-0.14	0.37	337.56
228.57	68.07	0.39	3.19E-02	6.15E-03	0.38	0.00	0.38	0.56
257.14	76.58	C.43	3.48E-02	6.56E-03	0.35	0.22	0.41	31.67
285.71	85.09	0.48	3.43E-02	6.53E-03	0.25	0.39	0.46	56.71
314.29	93.59	C.53	3.41E-02	6.25E-03	0.10	0.43	0.44	77.06
342.86	102.10	0.58	3.66E-02	6.38E-03	-0.06	0.44	0.44	98.15
371.43	110.61	0.63	3.85E-02	6.57E-03	-0.20	0.44	0.48	114.02
400.00	119.12	C.68	3.83E-02	6.27E-03	-0.33	0.33	0.47	135.13
428.57	127.63	0.72	3.81E-02	5.73E-03	-0.45	0.17	0.48	159.06
457.14	136.14	C.77	3.56E-02	5.59E-03	-0.44	0.02	0.44	177.18
485.71	144.65	C.82	3.17E-02	5.74E-03	-0.37	-0.08	0.38	192.98
514.29	153.15	0.87	2.84E-02	5.37E-03	-0.33	-0.14	0.36	203.09
542.86	161.66	C.92	2.52E-02	5.09E-03	-0.27	-0.24	0.36	221.60
571.43	170.17	C.97	2.42E-02	5.14E-03	-0.15	-0.32	0.35	244.62
600.00	178.68	1.01	2.38E-02	4.94E-03	-0.06	-0.34	0.35	259.60
628.57	187.19	1.06	2.28E-02	4.65E-03	0.01	-0.33	0.33	271.24
657.14	195.70	1.11	2.14E-02	4.33E-03	0.12	-0.22	0.25	297.85
685.71	204.21	1.16	1.82E-02	4.31E-03	0.18	-0.10	0.21	331.32
714.29	212.71	1.21	1.44E-02	4.10E-03	0.14	-0.04	0.15	344.76
742.86	221.22	1.26	1.23E-02	3.54E-03	0.12	0.01	0.12	5.07
771.43	229.73	1.30	1.17E-02	3.29E-03	0.18	0.02	0.18	6.26
800.00	238.24	1.35	1.10E-02	3.08E-03	0.19	0.05	0.20	14.70
828.57	246.75	1.40	9.77E-03	2.91E-03	0.14	0.09	0.16	34.65
857.14	255.26	1.45	8.33E-03	2.80E-03	0.07	0.12	0.13	60.43
885.71	263.77	1.50	7.07E-03	2.54E-03	0.03	0.11	0.12	72.34
914.29	272.27	1.55	6.12E-03	2.30E-03	-0.01	0.09	0.09	94.91
942.86	280.78	1.59	5.34E-03	2.29E-03	-0.02	0.10	0.10	98.82
971.43	289.29	1.64	4.78E-03	2.23E-03	-0.02	0.01	0.02	145.88
1000.00	297.80	1.69	4.19E-03	1.91E-03	-0.06	-0.09	0.11	234.28

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$
CONFIG. MA-2

MACH NO.= 1.0 TAPE NO.= 2.0 PART NO.= 4.3 J= 8 I= 9
RJJ(0)= 6.0287E-01 RII(0)= 6.0892E-01

	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	-0.01	-0.01	1.71E 01	-0.01	1.79E 01	0.01
69	1.72E 01	-0.01	-0.01	1.69E 01	-0.00	1.76E 01	0.01
68	1.70E 01	-0.00	-0.01	1.66E 01	0.00	1.74E 01	0.02
67	1.67E 01	0.00	-0.01	1.64E 01	0.00	1.71E 01	0.01
66	1.65E 01	0.00	-0.00	1.61E 01	-0.01	1.69E 01	-0.01
65	1.62E 01	0.00	0.01	1.59E 01	-0.01	1.66E 01	-0.02
64	1.60E 01	0.01	0.01	1.56E 01	-0.01	1.64E 01	-0.01
63	1.57E 01	0.01	0.02	1.54E 01	-0.01	1.61E 01	-0.00
62	1.55E 01	-0.01	0.03	1.51E 01	-0.00	1.59E 01	0.01
61	1.52E 01	-0.02	0.02	1.49E 01	0.01	1.56E 01	0.01
60	1.50E 01	-0.01	0.00	1.46E 01	0.01	1.54E 01	0.01
59	1.47E 01	-0.01	-0.00	1.44E 01	0.01	1.51E 01	0.01
58	1.45E 01	-0.01	0.02	1.41E 01	0.01	1.49E 01	0.01
57	1.42E 01	-0.00	0.03	1.39E 01	-0.00	1.46E 01	0.01
56	1.40E 01	0.00	0.02	1.36E 01	-0.00	1.44E 01	0.01
55	1.37E 01	0.01	0.01	1.34E 01	-0.00	1.41E 01	0.01
54	1.35E 01	0.00	0.01	1.31E 01	-0.00	1.39E 01	0.01
53	1.32E 01	-0.00	0.01	1.29E 01	-0.00	1.36E 01	0.01
52	1.30E 01	0.00	0.00	1.26E 01	0.00	1.34E 01	0.01
51	1.27E 01	0.01	0.00	1.24E 01	0.01	1.31E 01	0.01
50	1.25E 01	0.01	0.01	1.21E 01	0.01	1.29E 01	0.01
49	1.22E 01	0.00	0.00	1.19E 01	0.01	1.26E 01	0.01
48	1.20E 01	-0.00	-0.01	1.16E 01	0.02	1.24E 01	-0.00
47	1.17E 01	-0.00	-0.00	1.14E 01	-0.00	1.21E 01	-0.00
46	1.15E 01	-0.01	0.01	1.11E 01	-0.01	1.19E 01	0.00
45	1.12E 01	-0.00	0.01	1.09E 01	-0.01	1.16E 01	0.01
44	1.10E 01	0.01	0.00	1.06E 01	-0.02	1.14E 01	0.00
43	1.07E 01	0.02	-0.00	1.04E 01	-0.03	1.11E 01	-0.00
42	1.05E 01	0.01	0.00	1.01E 01	-0.01	1.09E 01	0.00
41	1.02E 01	-0.00	0.01	9.86E 00	0.01	1.06E 01	0.02
40	10.00E 00	-0.00	0.02	9.61E 00	0.00	1.04E 01	0.03
39	9.75E 00	-0.01	0.02	9.36E 00	-0.01	1.01E 01	0.02
38	9.50E 00	-0.02	0.00	9.11E 00	-0.01	9.89E 00	0.01
37	9.25E 00	-0.01	-0.01	8.86E 00	-0.00	9.64E 00	0.02
36	9.00E 00	0.00	-0.01	8.61E 00	-0.01	9.39E 00	0.03
35	8.75E 00	0.01	0.00	8.36E 00	-0.01	9.14E 00	0.03
34	8.50E 00	0.00	0.01	8.11E 00	-0.02	8.89E 00	0.02

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$ MACH NO.= 1.0 TAPE NO.= 2.0 PART NO.= 4.3 J= 8 I= 9
CONFIG. MA-2 RJJ(0)= 6.0287E-01 RII(0)= 6.0892E-01

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 00	0.00	0.02	7.86E 00	-0.01	8.64E 00	0.02
32	8.00E 00	0.01	0.02	7.61E 00	-0.01	8.39E 00	0.00
31	7.75E 00	0.02	0.02	7.36E 00	-0.02	8.14E 00	-0.01
30	7.50E 00	0.00	0.01	7.11E 00	-0.03	7.89E 00	-0.01
29	7.25E 00	-0.01	0.02	6.86E 00	-0.01	7.64E 00	-0.01
28	7.00E 00	-0.01	0.02	6.61E 00	0.01	7.39E 00	0.01
27	6.75E 00	-0.01	0.01	6.36E 00	0.02	7.14E 00	0.02
26	6.50E 00	-0.02	0.01	6.11E 00	0.02	6.89E 00	0.02
25	6.25E 00	-0.03	0.01	5.86E 00	0.01	6.64E 00	0.01
24	6.00E 00	-0.02	0.01	5.61E 00	0.00	6.39E 00	0.02
23	5.75E 00	-0.00	0.01	5.36E 00	0.01	6.14E 00	0.02
22	5.50E 00	-0.00	0.03	5.11E 00	0.02	5.89E 00	0.01
21	5.25E 00	-0.00	0.03	4.86E 00	0.02	5.64E 00	0.00
20	5.00E 00	0.01	0.02	4.61E 00	0.01	5.39E 00	-0.00
19	4.75E 00	0.01	0.02	4.36E 00	0.00	5.14E 00	-0.01
18	4.50E 00	-0.00	0.02	4.11E 00	0.01	4.89E 00	-0.01
17	4.25E 00	-0.01	0.03	3.86E 00	0.01	4.64E 00	-0.01
16	4.00E 00	-0.01	0.03	3.61E 00	-0.00	4.39E 00	-0.01
15	3.75E 00	0.00	0.03	3.36E 00	-0.03	4.14E 00	-0.02
14	3.50E 00	0.01	0.03	3.11E 00	-0.04	3.89E 00	-0.01
13	3.25E 00	0.02	0.04	2.86E 00	-0.04	3.64E 00	-0.01
12	3.00E 00	0.02	0.05	2.61E 00	-0.04	3.39E 00	-0.00
11	2.75E 00	0.01	0.05	2.36E 00	-0.02	3.14E 00	-0.01
10	2.50E 00	-0.00	0.03	2.11E 00	0.01	2.89E 00	-0.01
9	2.25E 00	-0.01	0.01	1.86E 00	0.05	2.64E 00	-0.01
8	2.00E 00	-0.04	-0.01	1.61E 00	0.10	2.39E 00	-0.00
7	1.75E 00	-0.06	-0.01	1.36E 00	0.18	2.14E 00	0.00
6	1.50E 00	-0.06	-0.00	1.11E 00	0.28	1.89E 00	0.01
5	1.25E 00	-0.05	-0.04	8.61E-01	0.28	1.64E 00	0.03
4	10.00E-01	-0.01	-0.05	6.11E-01	0.12	1.39E 00	0.01
3	7.50E-01	-0.02	-0.05	3.61E-01	-0.08	1.14E 00	-0.02
2	5.00E-01	0.05	0.07	1.11E-01	-0.18	8.89E-01	-0.04
1	2.50E-01	0.58	0.60	-1.39E-01	-0.15	6.39E-01	-0.06
0	0.	1.00	1.00	-3.89E-01	-0.09	3.89E-01	-0.09

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$

CONFIG. MA-2 | MACH NO.= 1.0 TAPE NO.= 2.0 PART NO.= 4.3 J= 8 I= 9
MODEL FREQ., S.F.= 8.81 PROTOTYPE FREQ., S.F.= 7.62 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NCIJ(F)	MOD. OF COHER.	PHASE OF COHER.
0.	0.	0.	2.31E-03	4.11E-03	0.16	-0.	0.16	360.00
28.57	8.51	0.05	4.76E-03	7.09E-03	0.11	0.02	0.12	8.05
57.14	17.02	0.10	5.12E-03	5.43E-03	0.09	0.22	0.23	68.39
85.71	25.53	0.14	5.34E-03	4.59E-03	0.11	0.37	0.39	73.05
114.29	34.03	0.19	5.19E-03	4.52E-03	0.09	0.34	0.35	74.63
142.86	42.54	0.24	5.13E-03	4.77E-03	0.05	0.32	0.33	80.94
171.43	51.05	0.29	5.40E-03	5.01E-03	-0.00	0.41	0.41	90.25
200.00	59.56	0.34	5.91E-03	5.51E-03	-0.09	0.45	0.46	101.23
228.57	68.07	0.39	6.64E-03	5.93E-03	-0.24	0.44	0.50	118.09
257.14	76.58	0.43	6.93E-03	6.36E-03	-0.36	0.47	0.59	127.72
285.71	85.09	0.48	6.64E-03	6.61E-03	-0.39	0.43	0.58	131.77
314.29	93.59	0.53	6.29E-03	6.43E-03	-0.39	0.34	0.52	139.11
342.86	102.10	0.58	6.47E-03	6.45E-03	-0.43	0.26	0.50	149.34
371.43	110.61	0.63	6.75E-03	6.62E-03	-0.48	0.20	0.52	157.09
400.00	119.12	0.68	6.08E-03	6.32E-03	-0.49	0.15	0.51	162.45
428.57	127.63	0.72	5.12E-03	5.66E-03	-0.47	0.11	0.49	167.19
457.14	136.14	0.77	4.70E-03	5.27E-03	-0.46	0.03	0.46	176.31
485.71	144.65	0.82	4.47E-03	5.30E-03	-0.42	-0.02	0.43	182.46
514.29	153.15	0.87	4.19E-03	5.24E-03	-0.39	-0.00	0.39	180.14
542.86	161.66	0.92	4.26E-03	4.93E-03	-0.36	-0.03	0.36	184.42
571.43	170.17	0.97	4.33E-03	4.89E-03	-0.31	-0.12	0.34	201.50
600.00	178.68	1.01	4.11E-03	4.96E-03	-0.26	-0.19	0.32	215.12
628.57	187.19	1.06	4.10E-03	4.72E-03	-0.23	-0.17	0.29	216.25
657.14	195.70	1.11	4.02E-03	4.30E-03	-0.22	-0.18	0.28	219.23
685.71	204.21	1.16	3.74E-03	4.44E-03	-0.20	-0.24	0.32	229.98
714.29	212.71	1.21	3.62E-03	4.58E-03	-0.21	-0.28	0.35	232.93
742.86	221.22	1.26	3.57E-03	4.07E-03	-0.18	-0.28	0.34	237.52
771.43	229.73	1.30	3.50E-03	3.63E-03	-0.09	-0.29	0.30	252.01
800.00	238.24	1.35	3.42E-03	3.35E-03	-0.04	-0.24	0.25	260.27
828.57	246.75	1.40	3.29E-03	2.98E-03	-0.03	-0.18	0.18	259.85
857.14	255.26	1.45	3.27E-03	2.64E-03	-0.04	-0.22	0.22	258.36
885.71	263.77	1.50	3.32E-03	2.50E-03	-0.06	-0.28	0.28	258.65
914.29	272.27	1.55	3.11E-03	2.39E-03	-0.03	-0.23	0.23	262.94
942.86	280.78	1.59	2.69E-03	2.29E-03	0.00	-0.18	0.18	270.29
971.43	289.29	1.64	2.43E-03	2.26E-03	-0.02	-0.20	0.20	263.76
1000.00	297.80	1.69	2.56E-03	2.02E-03	0.00	-0.17	0.17	270.01

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$ MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 6 I= 7
CONFIG. MA-2 RJJ(0)= 9.5518E-01 RII(0)= 3.7635E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	-0.00	0.00	1.71E 01	-0.01	1.79E 01	-0.00
69	1.72E 01	-0.01	0.01	1.68E 01	-0.02	1.77E 01	0.01
68	1.70E 01	-0.02	0.02	1.66E 01	-0.01	1.74E 01	0.02
67	1.67E 01	-0.01	0.02	1.63E 01	-0.00	1.72E 01	0.02
66	1.65E 01	0.00	0.02	1.61E 01	0.01	1.69E 01	0.00
65	1.62E 01	0.01	0.02	1.58E 01	0.02	1.67E 01	-0.02
64	1.60E 01	0.01	0.01	1.56E 01	0.01	1.64E 01	-0.01
63	1.57E 01	-0.00	-0.01	1.53E 01	0.00	1.62E 01	-0.01
62	1.55E 01	-0.01	-0.02	1.51E 01	-0.00	1.59E 01	-0.01
61	1.52E 01	-0.01	-0.01	1.48E 01	-0.01	1.57E 01	-0.00
60	1.50E 01	0.00	0.00	1.46E 01	-0.02	1.54E 01	0.01
59	1.47E 01	0.00	0.01	1.43E 01	-0.02	1.52E 01	0.01
58	1.45E 01	0.01	0.01	1.41E 01	-0.01	1.49E 01	0.01
57	1.42E 01	0.01	0.00	1.38E 01	-0.01	1.47E 01	-0.00
56	1.40E 01	0.00	-0.00	1.36E 01	-0.01	1.44E 01	-0.00
55	1.37E 01	0.00	-0.00	1.33E 01	-0.01	1.42E 01	-0.00
54	1.35E 01	0.00	0.00	1.31E 01	-0.00	1.39E 01	-0.00
53	1.32E 01	-0.00	0.00	1.28E 01	0.00	1.37E 01	0.00
52	1.30E 01	-0.01	-0.00	1.26E 01	0.01	1.34E 01	0.00
51	1.27E 01	-0.01	-0.00	1.23E 01	0.00	1.32E 01	-0.00
50	1.25E 01	-0.00	0.01	1.21E 01	-0.00	1.29E 01	-0.00
49	1.22E 01	0.00	0.01	1.18E 01	-0.01	1.27E 01	0.01
48	1.20E 01	-0.00	0.01	1.16E 01	-0.01	1.24E 01	0.01
47	1.17E 01	-0.00	0.00	1.13E 01	-0.01	1.22E 01	0.01
46	1.15E 01	0.01	-0.01	1.11E 01	-0.01	1.19E 01	-0.00
45	1.12E 01	0.02	-0.00	1.08E 01	-0.01	1.17E 01	-0.01
44	1.10E 01	0.02	-0.00	1.06E 01	0.00	1.14E 01	0.00
43	1.07E 01	0.02	0.01	1.03E 01	0.01	1.12E 01	0.01
42	1.05E 01	0.01	0.01	1.01E 01	0.01	1.09E 01	0.01
41	1.02E 01	-0.01	0.02	9.82E 00	0.01	1.07E 01	-0.01
40	10.00E 00	-0.03	0.01	9.57E 00	-0.00	1.04E 01	-0.02
39	9.75E 00	-0.03	0.01	9.32E 00	-0.02	1.02E 01	-0.01
38	9.50E 00	-0.01	0.02	9.07E 00	-0.03	9.93E 00	0.01
37	9.25E 00	0.01	0.03	8.82E 00	-0.03	9.68E 00	0.01
36	9.00E 00	0.03	0.03	8.57E 00	-0.01	9.43E 00	0.00
35	8.75E 00	0.04	0.03	8.32E 00	0.00	9.18E 00	-0.01
34	8.50E 00	0.03	0.01	8.07E 00	0.01	8.93E 00	-0.03

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$ MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 6 I= 7
CONFIG. MA-2 RJJ(0)= 9.5518E-01 RII(0)= 3.7635E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 00	0.02	-0.00	7.82E 00	0.01	8.68E 00	-0.04
32	8.00E 00	-0.00	-0.00	7.57E 00	0.01	8.43E 00	-0.02
31	7.75E 00	-0.01	-0.00	7.32E 00	0.02	8.18E 00	-0.00
30	7.50E 00	-0.02	0.00	7.07E 00	-0.00	7.93E 00	0.01
29	7.25E 00	-0.02	-0.00	6.82E 00	-0.02	7.68E 00	0.02
28	7.00E 00	-0.01	0.00	6.57E 00	-0.03	7.43E 00	0.02
27	6.75E 00	0.00	0.01	6.32E 00	-0.02	7.18E 00	0.02
26	6.50E 00	0.01	0.01	6.07E 00	-0.02	6.93E 00	0.01
25	6.25E 00	0.02	0.00	5.82E 00	-0.01	6.68E 00	0.00
24	6.00E 00	0.02	-0.01	5.57E 00	0.01	6.43E 00	-0.00
23	5.75E 00	0.02	-0.02	5.32E 00	0.02	6.18E 00	0.00
22	5.50E 00	0.01	-0.03	5.07E 00	0.02	5.93E 00	0.01
21	5.25E 00	0.01	-0.03	4.82E 00	0.01	5.68E 00	-0.01
20	5.00E 00	0.00	-0.01	4.57E 00	0.00	5.43E 00	-0.01
19	4.75E 00	-0.01	0.00	4.32E 00	-0.00	5.18E 00	-0.01
18	4.50E 00	-0.02	0.01	4.07E 00	-0.01	4.93E 00	-0.01
17	4.25E 00	-0.02	-0.01	3.82E 00	-0.00	4.68E 00	-0.00
16	4.00E 00	-0.00	-0.01	3.57E 00	0.00	4.43E 00	0.01
15	3.75E 00	0.00	-0.00	3.32E 00	-0.00	4.18E 00	0.03
14	3.50E 00	0.01	-0.00	3.07E 00	-0.01	3.93E 00	0.03
13	3.25E 00	0.01	-0.00	2.82E 00	-0.01	3.68E 00	0.01
12	3.00E 00	0.02	0.00	2.57E 00	-0.00	3.43E 00	-0.01
11	2.75E 00	0.02	0.00	2.32E 00	0.01	3.18E 00	-0.01
10	2.50E 00	0.02	0.00	2.07E 00	0.01	2.93E 00	-0.01
9	2.25E 00	0.01	0.00	1.82E 00	0.01	2.68E 00	-0.01
8	2.00E 00	-0.01	-0.01	1.57E 00	0.02	2.43E 00	-0.01
7	1.75E 00	-0.05	-0.01	1.32E 00	0.06	2.18E 00	-0.01
6	1.50E 00	-0.11	0.00	1.07E 00	0.10	1.93E 00	0.01
5	1.25E 00	-0.18	-0.02	8.22E-01	0.04	1.68E 00	0.03
4	10.00E-01	-0.22	-0.03	5.72E-01	-0.19	1.43E 00	0.06
3	7.50E-01	-0.16	-0.00	3.22E-01	-0.45	1.18E 00	0.10
2	5.00E-01	0.12	0.17	7.20E-02	-0.46	9.28E-01	0.13
1	2.50E-01	0.67	0.66	-1.78E-01	-0.22	6.78E-01	0.12
0	0.	1.00	1.00	-4.28E-01	0.02	4.28E-01	0.02

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$

CONFIG. MA-2 MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 6 I= 7
MODEL FREQ., S.F.=25.20 PROTOTYPE FREQ., S.F.= 6.71 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MCD. OF COHER.	PHASE OF CCHER.
0.	0.	0.	8.50E-03	6.09E-04	-0.35	0.	0.35	180.00
28.57	8.70	0.04	1.58E-02	1.15E-03	-0.35	-0.07	0.35	190.78
57.14	17.41	0.08	1.50E-02	1.15E-03	-0.36	-0.09	0.37	194.67
85.71	26.11	0.13	1.65E-02	1.29E-03	-0.39	-0.11	0.40	195.78
114.29	34.81	0.17	1.86E-02	1.32E-03	-0.41	-0.12	0.43	196.07
142.86	43.51	0.21	2.04E-02	1.19E-03	-0.41	-0.17	0.45	202.20
171.43	52.22	0.25	2.29E-02	1.11E-03	-0.42	-0.24	0.49	209.40
200.00	60.92	0.29	2.58E-02	1.17E-03	-0.46	-0.23	0.52	206.55
228.57	69.62	0.33	2.83E-02	1.21E-03	-0.47	-0.19	0.51	202.42
257.14	78.33	0.38	3.06E-02	1.18E-03	-0.45	-0.20	0.49	203.52
285.71	87.03	0.42	3.32E-02	1.19E-03	-0.49	-0.25	0.55	207.08
314.29	95.73	0.46	3.84E-02	1.21E-03	-0.54	-0.28	0.61	207.38
342.86	104.43	0.50	4.38E-02	1.13E-03	-0.57	-0.28	0.64	206.42
371.43	113.14	0.54	4.14E-02	1.03E-03	-0.54	-0.25	0.60	204.90
400.00	121.84	0.58	3.52E-02	1.05E-03	-0.51	-0.19	0.54	200.91
428.57	130.54	0.63	3.55E-02	1.11E-03	-0.53	-0.18	0.56	199.04
457.14	139.25	0.67	3.75E-02	1.08E-03	-0.55	-0.22	0.60	201.82
485.71	147.95	0.71	3.44E-02	9.80E-04	-0.53	-0.26	0.59	206.25
514.29	156.65	0.75	3.02E-02	8.61E-04	-0.48	-0.31	0.57	212.56
542.86	165.35	0.79	2.97E-02	8.42E-04	-0.47	-0.35	0.59	216.55
571.43	174.06	0.83	2.87E-02	8.51E-04	-0.51	-0.33	0.61	212.99
600.00	182.76	0.88	2.51E-02	8.08E-04	-0.52	-0.28	0.59	208.23
628.57	191.46	0.92	2.23E-02	7.84E-04	-0.47	-0.28	0.55	210.92
657.14	200.17	0.96	2.04E-02	7.90E-04	-0.45	-0.34	0.56	216.96
685.71	208.87	1.00	1.82E-02	7.15E-04	-0.43	-0.36	0.56	220.09
714.29	217.57	1.04	1.68E-02	6.05E-04	-0.35	-0.38	0.52	227.95
742.86	226.27	1.08	1.60E-02	5.73E-04	-0.32	-0.44	0.55	233.91
771.43	234.98	1.13	1.46E-02	5.55E-04	-0.33	-0.46	0.56	234.26
800.00	243.68	1.17	1.30E-02	5.27E-04	-0.25	-0.44	0.51	240.48
828.57	252.38	1.21	1.14E-02	4.84E-04	-0.21	-0.46	0.51	245.37
857.14	261.09	1.25	9.88E-03	4.41E-04	-0.25	-0.45	0.51	240.65
885.71	269.79	1.29	8.93E-03	4.20E-04	-0.26	-0.41	0.49	237.79
914.29	278.49	1.33	8.09E-03	3.76E-04	-0.21	-0.41	0.46	242.93
942.86	287.19	1.38	7.42E-03	3.13E-04	-0.11	-0.34	0.36	252.10
971.43	295.90	1.42	6.75E-03	2.75E-04	-0.00	-0.26	0.26	268.94
1000.00	304.60	1.46	6.07E-03	2.66E-04	-0.00	-0.31	0.31	269.56

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$ MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 6 I= 9
CONFIG. MA-2 RJJ(0)= 9.5283E-01 RII(0)= 3.3165E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.00	0.01	1.71E 01	0.01	1.79E 01	-0.01
69	1.72E 01	-0.02	0.01	1.68E 01	0.01	1.77E 01	-0.01
68	1.70E 01	-0.02	0.01	1.66E 01	0.01	1.74E 01	-0.01
67	1.67E 01	-0.01	-0.00	1.63E 01	0.00	1.72E 01	-0.00
66	1.65E 01	-0.00	-0.02	1.61E 01	-0.01	1.69E 01	-0.00
65	1.62E 01	0.01	-0.01	1.58E 01	-0.01	1.67E 01	-0.00
64	1.60E 01	0.01	0.00	1.56E 01	-0.01	1.64E 01	0.01
63	1.57E 01	0.00	0.00	1.53E 01	-0.02	1.62E 01	0.00
62	1.55E 01	-0.00	-0.01	1.51E 01	-0.02	1.59E 01	-0.01
61	1.52E 01	-0.00	-0.01	1.48E 01	-0.01	1.57E 01	-0.02
60	1.50E 01	-0.01	0.01	1.46E 01	-0.00	1.54E 01	-0.01
59	1.47E 01	-0.01	0.02	1.43E 01	-0.01	1.52E 01	0.00
58	1.45E 01	-0.01	0.01	1.41E 01	-0.01	1.49E 01	-0.00
57	1.42E 01	-0.00	-0.00	1.38E 01	0.00	1.47E 01	-0.01
56	1.40E 01	-0.01	-0.02	1.36E 01	0.01	1.44E 01	-0.01
55	1.37E 01	-0.00	-0.02	1.33E 01	0.01	1.42E 01	-0.00
54	1.35E 01	0.00	0.01	1.31E 01	0.01	1.39E 01	-0.01
53	1.32E 01	0.00	0.01	1.28E 01	0.01	1.37E 01	-0.01
52	1.30E 01	-0.00	-0.00	1.26E 01	0.02	1.34E 01	-0.01
51	1.27E 01	-0.00	0.00	1.23E 01	0.01	1.32E 01	-0.02
50	1.25E 01	0.01	0.00	1.21E 01	-0.00	1.29E 01	-0.01
49	1.22E 01	0.01	0.01	1.18E 01	-0.01	1.27E 01	-0.01
48	1.20E 01	-0.00	0.00	1.16E 01	-0.01	1.24E 01	0.00
47	1.17E 01	-0.01	-0.01	1.13E 01	-0.01	1.22E 01	-0.00
46	1.15E 01	-0.01	0.01	1.11E 01	-0.01	1.19E 01	-0.01
45	1.12E 01	-0.00	0.02	1.08E 01	-0.02	1.17E 01	-0.01
44	1.10E 01	0.01	0.01	1.06E 01	-0.02	1.14E 01	-0.00
43	1.07E 01	0.02	0.01	1.03E 01	-0.01	1.12E 01	-0.01
42	1.05E 01	0.02	0.01	1.01E 01	0.00	1.09E 01	-0.03
41	1.02E 01	-0.01	-0.01	9.83E 00	0.02	1.07E 01	-0.03
40	10.00E 00	-0.03	-0.01	9.58E 00	0.02	1.04E 01	-0.01
39	9.75E 00	-0.03	-0.01	9.33E 00	0.00	1.02E 01	0.01
38	9.50E 00	-0.02	-0.01	9.08E 00	-0.01	9.92E 00	0.02
37	9.25E 00	-0.00	0.02	8.83E 00	0.00	9.67E 00	0.03
36	9.00E 00	0.02	0.03	8.58E 00	0.02	9.42E 00	0.01
35	8.75E 00	0.03	-0.00	8.33E 00	0.02	9.17E 00	-0.01
34	8.50E 00	0.03	-0.00	8.08E 00	0.01	8.92E 00	-0.02

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^o$, $\beta = 0^o$
CONFIG. MA-2

MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 6 I= 9
RJJ(0)= 9.5283E-01 RII(0)= 3.3165E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E CC	0.02	-0.00	7.83E 00	-0.00	8.67E 00	-0.02
32	8.CCE CC	0.01	-0.00	7.58E 00	-0.02	8.42E 00	-0.01
31	7.75E CC	-0.00	0.02	7.33E 00	-0.03	8.17E 00	0.00
30	7.5CE CC	-0.01	0.03	7.08E 00	-0.02	7.92E 00	0.01
29	7.25E 00	-0.01	0.00	6.83E 00	-0.01	7.67E 00	0.00
28	7.CCE 00	-0.01	0.00	6.58E 00	-0.00	7.42E 00	-0.01
27	6.75E 00	-0.00	0.01	6.33E 00	-0.01	7.17E 00	-0.00
26	6.50E 00	0.01	-0.01	6.08E 00	-0.01	6.92E 00	0.00
25	6.25E 00	0.01	-0.01	5.83E 00	0.01	6.67E 00	-0.00
24	6.CCE CC	0.00	-0.00	5.58E 00	0.00	6.42E 00	-0.00
23	5.75E 00	0.00	0.01	5.33E 00	-0.01	6.17E 00	0.00
22	5.5CE CC	0.01	0.01	5.08E 00	-0.01	5.92E 00	0.00
21	5.25E 00	0.02	-0.00	4.83E 00	-0.00	5.67E 00	0.00
20	5.CCE 00	0.01	-0.00	4.58E 00	0.00	5.42E 00	-0.00
19	4.75E 00	-0.00	0.00	4.33E 00	0.00	5.17E 00	0.00
18	4.5CE 00	-0.02	-0.01	4.08E 00	-0.00	4.92E 00	0.00
17	4.25E 00	-0.03	-0.01	3.83E 00	-0.01	4.67E 00	0.00
16	4.00E 00	-0.02	0.01	3.58E 00	-0.01	4.42E 00	0.01
15	3.75E 00	-0.01	0.01	3.33E 00	-0.00	4.17E 00	0.01
14	3.5CE CC	0.00	-0.01	3.08E 00	-0.00	3.92E 00	-0.01
13	3.25E CC	0.02	-0.01	2.83E 00	-0.02	3.67E 00	-0.02
12	3.CCE 00	0.03	0.01	2.58E 00	-0.01	3.42E 00	-0.03
11	2.75E CC	0.03	0.01	2.33E 00	-0.00	3.17E 00	-0.02
10	2.5CE CC	0.03	0.01	2.08E 00	-0.01	2.92E 00	-0.01
9	2.25E 00	0.02	0.01	1.83E 00	-0.03	2.67E 00	-0.00
8	2.00E 00	-0.01	-0.01	1.58E 00	-0.02	2.42E 00	-0.01
7	1.75E 00	-0.05	0.00	1.33E 00	0.03	2.17E 00	-0.01
6	1.5CE 00	-0.11	0.05	1.08E 00	0.14	1.92E 00	-0.01
5	1.25E CC	-0.19	0.01	8.28E-01	0.16	1.67E 00	-0.01
4	10.00E-01	-0.23	0.03	5.78E-01	0.05	1.42E 00	-0.01
3	7.5CE-01	-0.16	0.01	3.28E-01	-0.06	1.17E 00	-0.01
2	5.00E-01	0.12	-0.17	7.80E-02	-0.08	9.22E-01	0.00
1	2.50E-01	0.67	0.37	-1.72E-01	-0.06	6.72E-01	-0.01
0	0.	1.00	1.00	-4.22E-01	-0.04	4.22E-01	-0.04

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^\circ$, $\beta = 0^\circ$

CONFIG. MA-2 MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 6 I= 9
MODEL FREQ., S.F.=25.20 PROTOTYPE FREQ., S.F.= 6.71 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NCIJ(F)	MCO. CF CCHER.	PHASE CF CCHER.
0.	0.	0.	7.69E-03	3.62E-04	-0.12	0.	0.12	180.00
28.57	8.70	0.04	1.54E-02	6.78E-04	-0.04	0.05	0.06	130.14
57.14	17.41	0.08	1.54E-02	6.28E-04	0.02	0.05	0.05	65.06
85.71	26.11	0.13	1.65E-02	6.49E-04	0.04	0.13	0.13	74.36
114.29	34.81	0.17	1.88E-02	6.58E-04	0.07	0.18	0.20	68.24
142.86	43.51	0.21	2.07E-02	6.28E-04	0.06	0.18	0.19	70.97
171.43	52.22	0.25	2.21E-02	5.87E-04	0.03	0.16	0.17	79.38
200.00	60.92	0.29	2.42E-02	5.51E-04	0.05	0.13	0.14	69.68
228.57	69.62	0.33	2.79E-02	5.64E-04	0.03	0.17	0.17	80.00
257.14	78.33	0.38	3.08E-02	5.84E-04	-0.09	0.21	0.23	114.10
285.71	87.03	0.42	3.29E-02	5.48E-04	-0.15	0.19	0.24	128.44
314.29	95.73	0.46	3.77E-02	5.34E-04	-0.12	0.16	0.20	126.99
342.86	104.43	0.50	4.33E-02	5.64E-04	-0.15	0.17	0.23	131.91
371.43	113.14	0.54	4.37E-02	5.79E-04	-0.18	0.20	0.27	132.21
400.00	121.84	0.58	3.88E-02	5.87E-04	-0.16	0.17	0.24	132.99
428.57	130.54	0.63	3.64E-02	5.93E-04	-0.20	0.07	0.21	159.37
457.14	139.25	0.67	3.66E-02	5.73E-04	-0.24	0.04	0.25	169.90
485.71	147.95	0.71	3.30E-02	5.42E-04	-0.22	0.06	0.22	163.92
514.29	156.65	0.75	2.86E-02	6.04E-04	-0.23	0.02	0.23	175.85
542.86	165.35	0.79	2.88E-02	6.80E-04	-0.31	-0.03	0.31	185.50
571.43	174.06	0.83	2.91E-02	6.18E-04	-0.33	-0.03	0.33	185.58
600.00	182.76	0.88	2.57E-02	5.65E-04	-0.25	-0.04	0.25	189.11
628.57	191.46	0.92	2.31E-02	6.17E-04	-0.21	-0.06	0.22	196.78
657.14	200.17	0.96	2.13E-02	6.74E-04	-0.24	-0.09	0.26	200.04
685.71	208.87	1.00	1.81E-02	6.73E-04	-0.19	-0.12	0.23	212.43
714.29	217.57	1.04	1.60E-02	6.66E-04	-0.10	-0.16	0.19	238.68
742.86	226.27	1.08	1.56E-02	7.11E-04	-0.11	-0.17	0.20	236.06
771.43	234.98	1.13	1.46E-02	7.22E-04	-0.14	-0.18	0.22	232.16
800.00	243.68	1.17	1.30E-02	6.87E-04	-0.09	-0.23	0.24	248.51
828.57	252.38	1.21	1.15E-02	6.41E-04	-0.05	-0.23	0.24	256.89
857.14	261.09	1.25	9.88E-03	6.20E-04	0.00	-0.19	0.19	271.16
885.71	269.79	1.29	8.57E-03	6.16E-04	0.07	-0.15	0.17	295.95
914.29	278.49	1.33	7.81E-03	5.57E-04	0.08	-0.11	0.14	306.21
942.86	287.19	1.38	7.29E-03	5.12E-04	0.08	-0.05	0.10	326.64
971.43	295.90	1.42	6.58E-03	5.22E-04	0.11	-0.03	0.12	342.96
1000.00	304.60	1.46	5.78E-03	5.42E-04	0.15	-0.08	0.17	330.97

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{o}$, $\beta = 0^{o}$ MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 7 I=11
CONFIG. MA-2 RJJ(0)= 3.6979E-C2 RII(0)= 1.1064E-02

I	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
70	1.75E 01	0.02	0.03	1.75E 01	0.01	1.75E 01	-0.00
69	1.72E 01	0.03	0.02	1.72E 01	0.01	1.73E 01	0.01
68	1.70E 01	0.03	0.01	1.70E 01	-0.00	1.70E 01	0.02
67	1.67E 01	0.03	0.03	1.67E 01	-0.01	1.68E 01	0.01
66	1.65E 01	0.03	0.04	1.65E 01	0.00	1.65E 01	0.00
65	1.62E 01	0.03	0.01	1.62E 01	0.02	1.63E 01	0.00
64	1.60E 01	0.03	-0.01	1.60E 01	0.03	1.60E 01	0.01
63	1.57E 01	0.01	-0.01	1.57E 01	0.02	1.58E 01	0.00
62	1.55E 01	0.01	0.02	1.55E 01	0.01	1.55E 01	-0.01
61	1.52E 01	0.02	0.03	1.52E 01	0.00	1.53E 01	-0.01
60	1.50E 01	0.03	0.02	1.50E 01	-0.00	1.50E 01	-0.02
59	1.47E 01	0.03	0.01	1.47E 01	0.00	1.48E 01	-0.02
58	1.45E 01	0.02	0.01	1.45E 01	0.01	1.45E 01	-0.01
57	1.42E 01	-0.00	0.01	1.42E 01	0.02	1.43E 01	0.00
56	1.40E 01	-0.01	0.01	1.40E 01	0.02	1.40E 01	0.01
55	1.37E 01	-0.02	0.02	1.37E 01	0.02	1.38E 01	0.01
54	1.35E 01	-0.01	0.02	1.35E 01	0.01	1.35E 01	0.00
53	1.32E 01	0.00	0.00	1.32E 01	0.01	1.33E 01	0.00
52	1.30E 01	-0.00	-0.01	1.30E 01	0.00	1.30E 01	0.02
51	1.27E 01	-0.01	-0.00	1.27E 01	0.00	1.28E 01	0.02
50	1.25E 01	-0.00	0.00	1.25E 01	0.01	1.25E 01	0.01
49	1.22E 01	0.01	0.01	1.22E 01	0.00	1.23E 01	-0.02
48	1.20E 01	0.01	0.01	1.20E 01	-0.00	1.20E 01	-0.02
47	1.17E 01	0.01	0.02	1.17E 01	-0.01	1.18E 01	-0.01
46	1.15E 01	0.01	0.01	1.15E 01	-0.01	1.15E 01	0.01
45	1.12E 01	-0.00	-0.01	1.12E 01	-0.01	1.13E 01	0.02
44	1.10E 01	-0.00	-0.02	1.10E 01	-0.00	1.10E 01	0.01
43	1.07E 01	0.02	-0.01	1.07E 01	0.00	1.08E 01	0.00
42	1.05E 01	0.02	0.02	1.05E 01	0.02	1.05E 01	0.00
41	1.02E 01	0.01	0.03	1.02E 01	0.02	1.03E 01	0.01
40	10.00E 00	0.00	0.00	9.97E 00	0.01	1.00E 01	0.01
39	9.75E 00	0.00	-0.01	9.72E 00	0.01	9.78E 00	0.00
38	9.50E 00	0.00	-0.01	9.47E 00	0.01	9.53E 00	0.00
37	9.25E 00	0.00	0.00	9.22E 00	0.01	9.28E 00	0.01
36	9.00E 00	0.01	0.01	8.97E 00	0.01	9.03E 00	0.02
35	8.75E 00	0.01	0.02	8.72E 00	0.00	8.78E 00	0.03
34	8.50E 00	0.01	0.03	8.47E 00	0.01	8.53E 00	0.04

CORRELATION DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^\circ$, $\beta = 0^\circ$
CONFIG. MA-2

MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 7 I=11
RJJ(0)= 3.6979E-02 RII(0)= 1.1064E-02

L	TAU(MSEC)	NRJJ(TAU)	NRII(TAU)	+TAU,C(MSEC)	NRIJ(+TAU,C)	-TAU,C(MSEC)	NRIJ(-TAU,C)
33	8.25E 00	0.00	0.04	8.22E 00	0.00	8.28E 00	0.03
32	8.00E 00	-0.00	0.03	7.97E 00	-0.01	8.03E 00	0.01
31	7.75E 00	-0.01	-0.00	7.72E 00	-0.00	7.78E 00	-0.00
30	7.50E 00	-0.02	-0.01	7.47E 00	0.01	7.53E 00	0.00
29	7.25E 00	-0.03	-0.00	7.22E 00	-0.00	7.28E 00	0.02
28	7.00E 00	-0.03	0.01	6.97E 00	-0.00	7.03E 00	0.02
27	6.75E 00	-0.02	0.02	6.72E 00	-0.00	6.78E 00	0.01
26	6.50E 00	-0.01	-0.01	6.47E 00	-0.00	6.53E 00	0.01
25	6.25E 00	-0.00	-0.00	6.22E 00	0.01	6.28E 00	0.01
24	6.00E 00	-0.01	0.02	5.97E 00	0.02	6.03E 00	0.01
23	5.75E 00	-0.01	0.01	5.72E 00	0.01	5.78E 00	-0.01
22	5.50E 00	-0.00	-0.01	5.47E 00	0.00	5.53E 00	0.00
21	5.25E 00	0.01	0.01	5.22E 00	0.01	5.28E 00	0.01
20	5.00E 00	0.01	0.02	4.97E 00	0.00	5.03E 00	0.01
19	4.75E 00	0.01	0.01	4.72E 00	0.00	4.78E 00	0.02
18	4.50E 00	0.02	0.00	4.47E 00	-0.00	4.53E 00	0.01
17	4.25E 00	0.02	0.01	4.22E 00	-0.00	4.28E 00	0.01
16	4.00E 00	0.02	0.01	3.97E 00	0.03	4.03E 00	0.01
15	3.75E 00	0.01	0.01	3.72E 00	0.05	3.78E 00	0.01
14	3.50E 00	-0.01	0.03	3.47E 00	0.05	3.53E 00	0.01
13	3.25E 00	-0.02	0.02	3.22E 00	0.02	3.28E 00	0.00
12	3.00E 00	-0.02	0.01	2.97E 00	-0.09	3.03E 00	-0.00
11	2.75E 00	-0.01	0.00	2.72E 00	-0.21	2.78E 00	0.00
10	2.50E 00	0.00	-0.00	2.47E 00	-0.14	2.53E 00	0.01
9	2.25E 00	0.01	-0.01	2.22E 00	0.03	2.28E 00	0.02
8	2.00E 00	0.01	-0.04	1.97E 00	0.07	2.03E 00	0.01
7	1.75E 00	0.02	-0.04	1.72E 00	0.02	1.78E 00	0.00
6	1.50E 00	0.03	0.02	1.47E 00	-0.02	1.53E 00	-0.00
5	1.25E 00	-0.01	-0.03	1.22E 00	-0.03	1.28E 00	0.01
4	10.00E-01	-0.03	-0.03	9.74E-01	-0.01	1.03E 00	0.03
3	7.50E-01	-0.01	-0.04	7.24E-01	0.03	7.76E-01	0.03
2	5.00E-01	0.14	-0.17	4.74E-01	0.03	5.26E-01	0.01
1	2.50E-01	0.64	0.38	2.24E-01	0.02	2.76E-01	0.01
0	0.	1.00	1.00	-2.58E-02	0.02	2.58E-02	0.02

SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

$\alpha = 0^{\circ}$, $\beta = 0^{\circ}$

CONFIG. MA-2 MACH NO.= 1.2 TAPE NO.= 2.0 PART NO.= 5.3 J= 7 I=11
MODEL FREQ., S.F.=25.20 PROTOTYPE FREQ., S.F.= 6.71 REDUCED FREQ., S.F.=1.00

MODEL FREQ.	PROTOTYPE FREQ.	REDUCED FREQ.	S.F.XSJJ(F)	S.F.XSII(F)	NCIJ(F)	NQIJ(F)	MCD. OF COHER.	PHASE OF COHER.
0.	0.	0.	5.84E-04	1.07E-04	0.14	-0.	0.14	360.00
28.57	8.70	0.04	1.16E-03	1.78E-04	0.04	-0.13	0.13	288.40
57.14	17.41	0.08	1.19E-03	1.42E-04	-0.08	-0.18	0.19	246.82
85.71	26.11	0.13	1.20E-03	1.44E-04	0.00	-0.14	0.14	271.16
114.29	34.81	0.17	1.10E-03	1.61E-04	0.12	-0.17	0.20	304.81
142.86	43.51	0.21	1.03E-03	1.70E-04	0.15	-0.18	0.23	311.44
171.43	52.22	0.25	1.11E-03	1.76E-04	0.17	-0.11	0.20	326.64
200.00	60.92	0.29	1.22E-03	2.07E-04	0.21	0.01	0.21	3.99
228.57	69.62	0.33	1.17E-03	2.41E-04	0.19	0.10	0.21	27.77
257.14	78.33	0.38	1.07E-03	2.46E-04	0.09	0.11	0.14	51.40
285.71	87.03	0.42	9.57E-04	2.29E-04	0.01	0.13	0.13	87.37
314.29	95.73	0.46	9.51E-04	2.28E-04	-0.08	0.16	0.18	116.72
342.86	104.43	0.50	9.92E-04	2.42E-04	-0.16	0.11	0.19	143.82
371.43	113.14	0.54	9.85E-04	2.29E-04	-0.18	-0.00	0.18	181.05
400.00	121.84	0.58	9.93E-04	2.07E-04	-0.20	-0.10	0.22	206.38
428.57	130.54	0.63	1.02E-03	2.03E-04	-0.10	-0.17	0.20	238.49
457.14	139.25	0.67	1.07E-03	2.17E-04	0.04	-0.25	0.26	279.24
485.71	147.95	0.71	1.07E-03	2.27E-04	0.14	-0.25	0.28	299.75
514.29	156.65	0.75	9.65E-04	2.09E-04	0.22	-0.13	0.25	329.46
542.86	165.35	0.79	8.85E-04	2.02E-04	0.29	0.03	0.29	6.35
571.43	174.06	0.83	8.55E-04	2.42E-04	0.27	0.17	0.32	32.83
600.00	182.76	0.88	8.30E-04	2.56E-04	0.16	0.26	0.31	59.05
628.57	191.46	0.92	7.77E-04	2.29E-04	0.01	0.31	0.31	87.40
657.14	200.17	0.96	7.41E-04	2.30E-04	-0.15	0.33	0.36	113.96
685.71	208.87	1.00	6.92E-04	2.39E-04	-0.24	0.30	0.38	128.07
714.29	217.57	1.04	6.40E-04	2.33E-04	-0.31	0.16	0.35	152.39
742.86	226.27	1.08	6.49E-04	2.31E-04	-0.35	0.03	0.35	174.85
771.43	234.98	1.13	6.11E-04	2.32E-04	-0.26	-0.05	0.26	192.05
800.00	243.68	1.17	5.39E-04	2.25E-04	-0.12	-0.15	0.19	232.81
828.57	252.38	1.21	4.86E-04	2.27E-04	0.00	-0.20	0.20	270.26
857.14	261.09	1.25	4.35E-04	2.34E-04	0.09	-0.21	0.23	293.62
885.71	269.79	1.29	4.09E-04	2.07E-04	0.13	-0.18	0.22	304.84
914.29	278.49	1.33	3.94E-04	1.70E-04	0.16	-0.10	0.19	329.58
942.86	287.19	1.38	3.56E-04	1.69E-04	0.24	-0.01	0.24	357.41
971.43	295.90	1.42	3.06E-04	1.84E-04	0.26	0.05	0.27	11.21
1000.00	304.60	1.46	2.72E-04	1.75E-04	0.16	0.11	0.20	33.38

7. REFERENCES

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