Distribution of this report is provided to the interest of information exchange. Responsibility for the contents resides in the author or organization that prepared it.
FLUCTUATING PRESSURE DATA
32% MERCURY-ATLAS CONFIGURATION

REPORT B661
COPY NO. 25

SUBMITTED UNDER NAS1-3179

PREPARED BY Robert E. Davis
R. E. Davis
Senior Engineer

APPROVED BY J. W. Schweiker
J. W. Schweiker
Senior Engineer

APPROVED BY N. H. Zimmerman
N. H. Zimmerman
Scientist

APPROVED BY C. H. Perisho
C. H. Perisho
Chief Structural Dynamics Engineer

MCDONNELL AIRCRAFT CORPORATION
LAMBERT - ST. LOUIS MUNICIPAL AIRPORT, BOX 516, ST. LOUIS 66, MO.
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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>TABLE OF CONTENTS</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>DEFINITIONS AND DISCUSSION OF DATA REDUCTION TECHNIQUES</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>TULLAHOMA MA-1 CONFIGURATION, 32% SCALE, FLUCTUATING PRESSURE DATA</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Test Information and Data Reduction Parameters</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Transducer Locations</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Index of Plots and Tabulations</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Plots</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Tabulations</td>
<td>46</td>
</tr>
<tr>
<td>6</td>
<td>TULLAHOMA MA-2 CONFIGURATION, 32% SCALE, FLUCTUATING PRESSURE DATA</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Test Information and Data Reduction Parameters</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Transducer Locations</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Index of Plots and Tabulations</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Plots</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Tabulations</td>
<td>94</td>
</tr>
<tr>
<td>7</td>
<td>REFERENCES</td>
<td>112</td>
</tr>
</tbody>
</table>
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 $\omega$ is the circular frequency, $\ell$ is a characteristic dimension and $U_\infty$ 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 $\Delta t$ 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

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

The cross-correlation function, which is defined as

$$R_{ij}(\tau) = \frac{p_i(t) p_j(t-\tau)}{\text{lim}_{T \to \infty} \frac{1}{2T} \int_{-T}^{T} p_i(t) p_j(t-\tau) \, dt}$$

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 \(\omega\). 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:

\[
\text{Degrees of Freedom} = \frac{\text{No. of Samples}}{\text{No. of Spectral Est.}}
\]

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

\[
B_p = \left(\frac{D_M}{D_p}\right)\left(\frac{U_p}{U_M}\right)(SR/m)
\]

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

<table>
<thead>
<tr>
<th>ENGINEER SYMBOL</th>
<th>TABULATION SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\tau$</td>
<td>$\text{TAU}$</td>
<td>Lag Time for Auto-correlation</td>
</tr>
<tr>
<td>$R_{ii}(\tau)$</td>
<td></td>
<td>Auto-correlation</td>
</tr>
<tr>
<td>$R_{ii}(0)$</td>
<td>$R_{II}(0)$</td>
<td>Auto-correlation for zero lag time</td>
</tr>
<tr>
<td>$R_{ii}(\tau)/R_{ii}(0)$</td>
<td>$N_{RII}($TAU$)$</td>
<td>Normalized auto-correlation</td>
</tr>
<tr>
<td>$\tau_s$</td>
<td></td>
<td>Time shift error between records due to recorder head spacing</td>
</tr>
<tr>
<td>$\tau_c$</td>
<td>$\text{TAU,C}$</td>
<td>True $\tau$ after correction for $\tau_s$</td>
</tr>
<tr>
<td>$R_{ij}(\tau_c)$</td>
<td></td>
<td>Cross-correlation</td>
</tr>
<tr>
<td>$R_{ij}(\pm \tau_c)/\sqrt{R_{ii}(0)R_{jj}(0)}$</td>
<td>$N_{RIJ}(\pm $TAU,C$)$</td>
<td>Normalized cross-correlation</td>
</tr>
<tr>
<td>$f_M$</td>
<td>$\text{MODEL FREQUENCY}$</td>
<td>Model frequency</td>
</tr>
<tr>
<td>$f_P$</td>
<td>$\text{PROTOTYPE FREQ.}$</td>
<td>Prototype frequency</td>
</tr>
<tr>
<td>$\omega l/u_\infty$</td>
<td>$\text{REDUCED FREQ.}$</td>
<td>Reduced frequency</td>
</tr>
<tr>
<td>$S_{ii}(f)$</td>
<td></td>
<td>Power spectrum</td>
</tr>
<tr>
<td>$S_P \times S_{ii}(f)$</td>
<td>$S_P \times S_{II}(F)$</td>
<td>Scale factor times power spectrum</td>
</tr>
<tr>
<td>$C_{ij}(f)$</td>
<td></td>
<td>Co-spectrum</td>
</tr>
<tr>
<td>$C_{ij}(f)/\sqrt{S_{ii}(f)S_{jj}(f)}$</td>
<td>$N_{CIJ}(F)$</td>
<td>Normalized co-spectrum</td>
</tr>
<tr>
<td>$Q_{ij}(f)$</td>
<td></td>
<td>Quad-spectrum</td>
</tr>
<tr>
<td>$Q_{ij}(f)/\sqrt{S_{ii}(f)S_{jj}(f)}$</td>
<td>$N_{QIJ}(F)$</td>
<td>Normalized quad-spectrum</td>
</tr>
</tbody>
</table>
TABLE I DEFINITION OF SYMBOLS (CONT'D)

<table>
<thead>
<tr>
<th>ENGINEER SYMBOL</th>
<th>TABULATION SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\rho(f)$</td>
<td>MOD. OF COHER. (MOC)</td>
<td>Modulus of coherency, ( \sqrt{[\text{NCIJ}(F)]^2 + [\text{NQIJ}(F)]^2} )</td>
</tr>
<tr>
<td>$\phi(f)$</td>
<td>PHASE OF COHER. (POC)</td>
<td>Phase of coherency, ( \tan^{-1}\frac{\text{NQIJ}(F)}{\text{NCIJ}(F)} )</td>
</tr>
<tr>
<td>I,J</td>
<td></td>
<td>Indicate transducer number</td>
</tr>
<tr>
<td>MSEC</td>
<td></td>
<td>Milliseconds</td>
</tr>
</tbody>
</table>
5. TULLAHOMA MA-1 CONFIGURATION, 32% SCALE

FLUCTUATING PRESSURE DATA

TEST INFORMATION AND DATA REDUCTION PARAMETERS

<table>
<thead>
<tr>
<th>Wind Tunnel</th>
<th>AEDC 16' x 16' Propulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Test</td>
<td>October 1960</td>
</tr>
<tr>
<td>Model Size</td>
<td>32%</td>
</tr>
<tr>
<td>Sample Rate</td>
<td>4,000/sec.</td>
</tr>
<tr>
<td>No. of Samples</td>
<td>12,000</td>
</tr>
<tr>
<td>No. of Special Estimates</td>
<td>70</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>343</td>
</tr>
<tr>
<td>Filter Bandwidth (Prototype Frequency)</td>
<td>17.61 - 18.12 cps</td>
</tr>
<tr>
<td>Characteristic Length (Model)</td>
<td>0.854 ft.</td>
</tr>
<tr>
<td>Mach No.</td>
<td>Item</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>1.0</td>
<td>Auto 7 x 7</td>
</tr>
<tr>
<td></td>
<td>Auto 6 x 6</td>
</tr>
<tr>
<td></td>
<td>Cross 7 x 6</td>
</tr>
<tr>
<td></td>
<td>PSD 7 x 7</td>
</tr>
<tr>
<td></td>
<td>PSD 6 x 6</td>
</tr>
<tr>
<td></td>
<td>C &amp; Q 7 x 6</td>
</tr>
<tr>
<td></td>
<td>LOC 7 x 6</td>
</tr>
<tr>
<td></td>
<td>7 x 6</td>
</tr>
<tr>
<td></td>
<td>POC 7 x 6</td>
</tr>
<tr>
<td>9 x 6</td>
<td>Auto 9 x 9</td>
</tr>
<tr>
<td></td>
<td>Auto 6 x 6</td>
</tr>
<tr>
<td></td>
<td>Cross 9 x 6</td>
</tr>
<tr>
<td></td>
<td>PSD 9 x 9</td>
</tr>
<tr>
<td></td>
<td>PSD 6 x 6</td>
</tr>
<tr>
<td></td>
<td>C &amp; Q 9 x 6</td>
</tr>
<tr>
<td></td>
<td>LOC 9 x 6</td>
</tr>
<tr>
<td>9 x 6</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>POC 9 x 6</td>
</tr>
<tr>
<td>9 x 8</td>
<td>Auto 9 x 9</td>
</tr>
<tr>
<td></td>
<td>Auto 8 x 8</td>
</tr>
<tr>
<td></td>
<td>Cross 9 x 8</td>
</tr>
<tr>
<td></td>
<td>PSD 9 x 9</td>
</tr>
<tr>
<td></td>
<td>PSD 8 x 8</td>
</tr>
<tr>
<td></td>
<td>C &amp; Q 9 x 8</td>
</tr>
<tr>
<td>Mach No.</td>
<td>$\alpha$</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>1.0</td>
<td>$0^\circ$</td>
</tr>
<tr>
<td>1.2</td>
<td>$0^\circ$</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Mach No.</td>
<td>$\alpha$</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>1.5</td>
<td>0°</td>
</tr>
<tr>
<td>1.5</td>
<td>0°</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>0°</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST

CONFIGURATION MA-1, MACH NO. = 1.0, TAP NO. = 5.0, PART NO. = 12.3

I = 7
J = 6
\alpha = 0°
\beta = 0°

NORMALIZED CROSS CORRELATION NLI (TAU, C)
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3

\[ S\xi_x \times 10^3 \text{ (PSI)/cps for Model and Prototype Freq.)} \]

\[ \text{REDUCED FREQ. S.F. = 1.00} \]

\[ \text{MODEL FREQ. (CPS) S.F. = 2.98} \]

\[ \text{PROTOTYPE FREQ. (CPS) S.F. = 2.73} \]
TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3

T = 0
β = 0°
α = 0°

NORMALIZED CROSS CORRELATION RNL/D (T/N)
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.0, TAPE NO. = 5.0, PART NO. = 12.3

\[ S(t) = 10^3 \times \frac{\delta(t)}{f(t)} \]

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

\[ S.P. \times \sin(\theta) \times 10^3 \] / CPS FOR MODEL AND PROTOTYPE FREQ.

REDUCED FREQ. S.F. = 1.00

- \( I = 9 \)
- \( J = 6 \)
- \( \alpha = 0^\circ \)
- \( \beta = 0^\circ \)

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 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 1126.0
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 HILF (TAU, Ω)

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

\[
\begin{align*}
I &= 7 \\
J &= 6 \\
\alpha &= 0^\circ \\
\beta &= 0^\circ \\
\end{align*}
\]

S.F. x SII(f) x 10^3, DIMENSIONLESS FOR REDUCED FREQ.
(PSI)^2/CTS FOR MODEL AND Prototype Freq.

REDUCED FREQ. \quad S.F. = 1.00

MODEL FREQ. (CPS) S.F. = 8.59

0 \quad 29.1 \quad 58.2 \quad 87.3 \quad 116.4 \quad 145.5 \quad 174.6 \quad 203.7 \quad 232.8 \quad 261.9 \quad 291.0 \quad 320.1 \quad 349.2 \quad 378.8 \quad 407.4

PROTOTYPE FREQ. (CPS) S.F. = 2.45

0 \quad 93.2 \quad 186.5 \quad 279.7 \quad 373.0 \quad 466.2 \quad 559.4 \quad 652.7 \quad 745.9 \quad 839.2 \quad 932.4 \quad 1025.6 \quad 1118.9 \quad 1212.1 \quad 1305.4
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-1, MACH NO. = 1.2, TAPE NO. = 5.0, PART NO. = 13.3

REVISED REPORT
REVISED MODEL

= CO-SPECTRUM
- - QUAD-SPECTRUM

I = 7, J = 6
α = 0°
β = 0°

NORMALIZED CO. AND QUAD. SPECTRA, NCJ1(f) AND NCJ2(f)

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  1118.9  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  378.3  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

\[ I = 9 \]
\[ J = 6 \]
\[ \alpha = 0^\circ \]
\[ \beta = 0^\circ \]

NORMALIZED CROSS CORRELATION (TAU, C)

TAU, C (USEC)

DATA 30 APRIL 1965

REVISIONS

MODELS

REPORT B661

PAGE 32

MCDONELL

ST. LOUIS, MISSOURI
TULLAHOMA 32 PERCENT MERCURY 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°

S.F. x S/F (PSI²/CPS) FOR MODEL AND PROTOTYPE FREQ.

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

NORMALIZED CO. AND QUAD. SPECTRA, NCJI(P) AND NCJI*(P)

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 NC. = 1.0**  
**TAPE NO. = 5.0**  
**PART NC. = 17.3**  
**J = 6**  
**I = 7**

<table>
<thead>
<tr>
<th>I</th>
<th>TAU (MSEC)</th>
<th>ARJ (TAU)</th>
<th>ARI (TAU)</th>
<th>+TAU, C (MSEC)</th>
<th>ARIJ (-TAU, C)</th>
<th>ARIJ (-TAU, C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>1.75E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.65E 01</td>
<td>0.01</td>
<td>1.81E 01</td>
</tr>
<tr>
<td>69</td>
<td>1.72E 01</td>
<td>-0.01</td>
<td>0.02</td>
<td>1.67E 01</td>
<td>-0.00</td>
<td>1.78E 01</td>
</tr>
<tr>
<td>68</td>
<td>1.73E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.64E 01</td>
<td>-0.01</td>
<td>1.77E 01</td>
</tr>
<tr>
<td>67</td>
<td>1.67E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.62E 01</td>
<td>-0.01</td>
<td>1.73E 01</td>
</tr>
<tr>
<td>66</td>
<td>1.69E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.59E 01</td>
<td>-0.01</td>
<td>1.71E 01</td>
</tr>
<tr>
<td>65</td>
<td>1.62E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.57E 01</td>
<td>-0.01</td>
<td>1.68E 01</td>
</tr>
<tr>
<td>64</td>
<td>1.60E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.54E 01</td>
<td>-0.00</td>
<td>1.66E 01</td>
</tr>
<tr>
<td>63</td>
<td>1.57E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.52E 01</td>
<td>-0.00</td>
<td>1.63E 01</td>
</tr>
<tr>
<td>62</td>
<td>1.55E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.49E 01</td>
<td>-0.00</td>
<td>1.61E 01</td>
</tr>
<tr>
<td>61</td>
<td>1.52E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.47E 01</td>
<td>-0.00</td>
<td>1.58E 01</td>
</tr>
<tr>
<td>60</td>
<td>1.48E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.44E 01</td>
<td>-0.00</td>
<td>1.56E 01</td>
</tr>
<tr>
<td>59</td>
<td>1.47E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.42E 01</td>
<td>-0.00</td>
<td>1.53E 01</td>
</tr>
<tr>
<td>58</td>
<td>1.45E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.39E 01</td>
<td>-0.00</td>
<td>1.51E 01</td>
</tr>
<tr>
<td>57</td>
<td>1.42E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.37E 01</td>
<td>-0.00</td>
<td>1.48E 01</td>
</tr>
<tr>
<td>56</td>
<td>1.40E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.34E 01</td>
<td>-0.00</td>
<td>1.46E 01</td>
</tr>
<tr>
<td>55</td>
<td>1.37E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.32E 01</td>
<td>-0.00</td>
<td>1.44E 01</td>
</tr>
<tr>
<td>54</td>
<td>1.35E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.29E 01</td>
<td>-0.00</td>
<td>1.41E 01</td>
</tr>
<tr>
<td>53</td>
<td>1.32E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.27E 01</td>
<td>-0.00</td>
<td>1.38E 01</td>
</tr>
<tr>
<td>52</td>
<td>1.31E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.24E 01</td>
<td>-0.00</td>
<td>1.36E 01</td>
</tr>
<tr>
<td>51</td>
<td>1.27E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.22E 01</td>
<td>-0.00</td>
<td>1.33E 01</td>
</tr>
<tr>
<td>50</td>
<td>1.25E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.19E 01</td>
<td>-0.00</td>
<td>1.31E 01</td>
</tr>
<tr>
<td>49</td>
<td>1.22E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.17E 01</td>
<td>-0.00</td>
<td>1.28E 01</td>
</tr>
<tr>
<td>48</td>
<td>1.20E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.14E 01</td>
<td>-0.00</td>
<td>1.25E 01</td>
</tr>
<tr>
<td>47</td>
<td>1.17E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.12E 01</td>
<td>-0.00</td>
<td>1.23E 01</td>
</tr>
<tr>
<td>46</td>
<td>1.16E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.09E 01</td>
<td>-0.00</td>
<td>1.21E 01</td>
</tr>
<tr>
<td>45</td>
<td>1.13E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.07E 01</td>
<td>-0.00</td>
<td>1.18E 01</td>
</tr>
<tr>
<td>44</td>
<td>1.11E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.04E 01</td>
<td>-0.00</td>
<td>1.16E 01</td>
</tr>
<tr>
<td>43</td>
<td>1.09E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.02E 01</td>
<td>-0.00</td>
<td>1.13E 01</td>
</tr>
<tr>
<td>42</td>
<td>1.07E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>9.95E 00</td>
<td>0.00</td>
<td>1.09E 01</td>
</tr>
<tr>
<td>41</td>
<td>1.05E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>9.7E 00</td>
<td>0.00</td>
<td>1.06E 01</td>
</tr>
<tr>
<td>40</td>
<td>1.03E 01</td>
<td>-0.01</td>
<td>0.03</td>
<td>9.4E 00</td>
<td>0.00</td>
<td>1.03E 01</td>
</tr>
<tr>
<td>39</td>
<td>9.75E 00</td>
<td>-0.01</td>
<td>0.03</td>
<td>9.2E 00</td>
<td>0.00</td>
<td>9.90E 00</td>
</tr>
<tr>
<td>38</td>
<td>9.50E 00</td>
<td>-0.02</td>
<td>0.03</td>
<td>9.0E 00</td>
<td>0.00</td>
<td>9.55E 00</td>
</tr>
<tr>
<td>37</td>
<td>8.75E 00</td>
<td>-0.02</td>
<td>0.03</td>
<td>8.2E 00</td>
<td>0.00</td>
<td>9.30E 00</td>
</tr>
<tr>
<td>36</td>
<td>8.50E 00</td>
<td>-0.02</td>
<td>0.03</td>
<td>7.5E 00</td>
<td>0.00</td>
<td>9.05E 00</td>
</tr>
</tbody>
</table>

**REVISED REPORT**

**~661**

**MODEL**

**8661**
**CORRELATION DATA**

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

\[
\alpha = 0^\circ, \quad \beta = 0^\circ
\]

**CONFIG. MA-1**

<table>
<thead>
<tr>
<th>( \tau )</th>
<th>( h(\text{msec}) )</th>
<th>NRRI(( \tau ))</th>
<th>NRII(( \tau ))</th>
<th>( + \tau, (\text{msec}) )</th>
<th>NRIJ(( + \tau ), C)</th>
<th>- ( \tau, (\text{msec}) )</th>
<th>NRIJ(-( \tau ), C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>6.25E-01</td>
<td>-0.12</td>
<td>0.01</td>
<td>7.75E-01</td>
<td>0.01</td>
<td>8.81E-01</td>
<td>-0.12</td>
</tr>
<tr>
<td>32</td>
<td>7.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>7.45E-01</td>
<td>0.01</td>
<td>8.15E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>31</td>
<td>8.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>6.95E-01</td>
<td>0.01</td>
<td>8.05E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>30</td>
<td>1.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>6.65E-01</td>
<td>0.01</td>
<td>8.00E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>29</td>
<td>1.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>6.15E-01</td>
<td>0.01</td>
<td>7.55E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>28</td>
<td>1.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>5.85E-01</td>
<td>0.01</td>
<td>7.30E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>27</td>
<td>1.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>5.55E-01</td>
<td>0.01</td>
<td>7.00E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>26</td>
<td>2.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>5.30E-01</td>
<td>0.01</td>
<td>6.80E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>25</td>
<td>2.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>5.15E-01</td>
<td>0.01</td>
<td>6.60E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>24</td>
<td>2.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>5.00E-01</td>
<td>0.01</td>
<td>6.40E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>23</td>
<td>2.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>4.85E-01</td>
<td>0.01</td>
<td>6.20E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>22</td>
<td>3.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>4.70E-01</td>
<td>0.01</td>
<td>6.00E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>21</td>
<td>3.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>4.55E-01</td>
<td>0.01</td>
<td>5.80E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>20</td>
<td>3.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>4.40E-01</td>
<td>0.01</td>
<td>5.60E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>19</td>
<td>3.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>4.25E-01</td>
<td>0.01</td>
<td>5.40E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>18</td>
<td>4.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>4.10E-01</td>
<td>0.01</td>
<td>5.20E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>17</td>
<td>4.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>3.95E-01</td>
<td>0.01</td>
<td>5.00E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>16</td>
<td>4.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>3.80E-01</td>
<td>0.01</td>
<td>4.80E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>15</td>
<td>4.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>3.65E-01</td>
<td>0.01</td>
<td>4.60E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>14</td>
<td>5.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>3.50E-01</td>
<td>0.01</td>
<td>4.40E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>13</td>
<td>5.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>3.35E-01</td>
<td>0.01</td>
<td>4.20E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>12</td>
<td>5.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>3.20E-01</td>
<td>0.01</td>
<td>4.00E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>11</td>
<td>5.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>3.05E-01</td>
<td>0.01</td>
<td>3.80E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>10</td>
<td>6.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.90E-01</td>
<td>0.01</td>
<td>3.60E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>9</td>
<td>6.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.75E-01</td>
<td>0.01</td>
<td>3.40E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>8</td>
<td>6.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.60E-01</td>
<td>0.01</td>
<td>3.20E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>7</td>
<td>6.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.45E-01</td>
<td>0.01</td>
<td>3.00E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>6</td>
<td>7.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.30E-01</td>
<td>0.01</td>
<td>2.80E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>5</td>
<td>7.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.15E-01</td>
<td>0.01</td>
<td>2.60E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>4</td>
<td>7.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.00E-01</td>
<td>0.01</td>
<td>2.40E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>3</td>
<td>7.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.85E-01</td>
<td>0.01</td>
<td>2.20E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>2</td>
<td>8.0E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.70E-01</td>
<td>0.01</td>
<td>2.00E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>1</td>
<td>8.25E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.55E-01</td>
<td>0.01</td>
<td>1.80E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>0</td>
<td>8.5E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.40E-01</td>
<td>0.01</td>
<td>1.60E-01</td>
<td>-0.01</td>
</tr>
</tbody>
</table>
### TULLAHOMA 32 PERCENT MERCURY
### FLUCTUATING PRESSURE TEST

**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**

#### SPECTRAL DATA

<table>
<thead>
<tr>
<th>FREQ.</th>
<th>S.F.</th>
<th>XSDZ(F)</th>
<th>XSDZ(F)</th>
<th>lCIJ(F)</th>
<th>lCIJ(F)</th>
<th>lCIJ(F)</th>
<th>MOD. CF PHASE OF</th>
<th>COHER.</th>
<th>COHER.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>-1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>187.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.67</td>
<td>8.62</td>
<td>0.14</td>
<td>2.24E-03</td>
<td>5.14E-03</td>
<td>-0.07</td>
<td>0.07</td>
<td>183.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57.14</td>
<td>17.25</td>
<td>0.28</td>
<td>2.11E-03</td>
<td>3.85E-03</td>
<td>-0.11</td>
<td>0.01</td>
<td>174.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85.71</td>
<td>25.97</td>
<td>0.43</td>
<td>2.16E-03</td>
<td>2.65E-03</td>
<td>-0.21</td>
<td>0.07</td>
<td>161.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114.29</td>
<td>34.49</td>
<td>0.57</td>
<td>2.10E-03</td>
<td>2.69E-03</td>
<td>-0.26</td>
<td>0.13</td>
<td>153.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>142.86</td>
<td>43.11</td>
<td>0.71</td>
<td>2.13E-03</td>
<td>1.82E-03</td>
<td>-0.32</td>
<td>0.11</td>
<td>146.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.43</td>
<td>51.74</td>
<td>0.85</td>
<td>2.48E-03</td>
<td>1.81E-03</td>
<td>-0.39</td>
<td>0.10</td>
<td>139.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200.00</td>
<td>60.36</td>
<td>0.99</td>
<td>2.84E-03</td>
<td>1.99E-03</td>
<td>-0.47</td>
<td>0.12</td>
<td>132.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>228.57</td>
<td>69.98</td>
<td>1.13</td>
<td>2.88E-03</td>
<td>1.95E-03</td>
<td>-0.57</td>
<td>0.11</td>
<td>126.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>257.14</td>
<td>77.61</td>
<td>1.26</td>
<td>2.96E-03</td>
<td>1.86E-03</td>
<td>-0.60</td>
<td>0.05</td>
<td>119.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>285.71</td>
<td>86.23</td>
<td>1.42</td>
<td>3.09E-03</td>
<td>1.77E-03</td>
<td>-0.60</td>
<td>0.05</td>
<td>113.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>314.26</td>
<td>94.85</td>
<td>1.58</td>
<td>3.27E-03</td>
<td>1.76E-03</td>
<td>-0.60</td>
<td>0.05</td>
<td>106.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>342.86</td>
<td>103.47</td>
<td>1.73</td>
<td>3.52E-03</td>
<td>1.71E-03</td>
<td>-0.58</td>
<td>0.15</td>
<td>100.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>371.43</td>
<td>112.10</td>
<td>1.84</td>
<td>3.59E-03</td>
<td>1.60E-03</td>
<td>-0.57</td>
<td>0.19</td>
<td>93.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400.00</td>
<td>120.72</td>
<td>1.98</td>
<td>3.56E-03</td>
<td>1.59E-03</td>
<td>-0.57</td>
<td>0.21</td>
<td>86.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.57</td>
<td>129.34</td>
<td>2.13</td>
<td>3.66E-03</td>
<td>1.71E-03</td>
<td>-0.57</td>
<td>0.24</td>
<td>80.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>457.14</td>
<td>137.97</td>
<td>2.27</td>
<td>3.53E-03</td>
<td>1.73E-03</td>
<td>-0.54</td>
<td>0.33</td>
<td>74.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>485.71</td>
<td>146.55</td>
<td>2.41</td>
<td>3.17E-03</td>
<td>1.59E-03</td>
<td>-0.50</td>
<td>0.41</td>
<td>68.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>514.29</td>
<td>155.21</td>
<td>2.55</td>
<td>2.83E-03</td>
<td>1.42E-03</td>
<td>-0.49</td>
<td>0.44</td>
<td>63.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>542.86</td>
<td>163.83</td>
<td>2.69</td>
<td>2.67E-03</td>
<td>1.21E-03</td>
<td>-0.45</td>
<td>0.43</td>
<td>58.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>571.43</td>
<td>172.46</td>
<td>2.83</td>
<td>2.58E-03</td>
<td>1.33E-03</td>
<td>-0.41</td>
<td>0.42</td>
<td>53.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>600.00</td>
<td>181.08</td>
<td>2.99</td>
<td>2.43E-03</td>
<td>1.27E-03</td>
<td>-0.40</td>
<td>0.40</td>
<td>48.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>628.57</td>
<td>189.70</td>
<td>3.12</td>
<td>2.01E-03</td>
<td>1.19E-03</td>
<td>-0.38</td>
<td>0.38</td>
<td>44.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>657.14</td>
<td>198.32</td>
<td>3.26</td>
<td>1.80E-03</td>
<td>9.35E-04</td>
<td>-0.30</td>
<td>0.46</td>
<td>40.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>685.71</td>
<td>207.93</td>
<td>3.40</td>
<td>1.69E-03</td>
<td>9.25E-04</td>
<td>-0.21</td>
<td>0.46</td>
<td>36.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>714.29</td>
<td>217.57</td>
<td>3.54</td>
<td>1.50E-03</td>
<td>9.72E-04</td>
<td>-0.16</td>
<td>0.51</td>
<td>33.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>742.86</td>
<td>227.20</td>
<td>3.67</td>
<td>1.57E-03</td>
<td>9.92E-04</td>
<td>-0.13</td>
<td>0.52</td>
<td>30.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>771.43</td>
<td>236.83</td>
<td>3.81</td>
<td>1.56E-03</td>
<td>8.11E-04</td>
<td>-0.13</td>
<td>0.51</td>
<td>28.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>800.00</td>
<td>246.44</td>
<td>3.96</td>
<td>1.50E-03</td>
<td>7.50E-04</td>
<td>-0.16</td>
<td>0.48</td>
<td>26.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>828.57</td>
<td>256.06</td>
<td>4.11</td>
<td>1.27E-03</td>
<td>6.89E-04</td>
<td>-0.16</td>
<td>0.49</td>
<td>23.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>857.14</td>
<td>255.69</td>
<td>4.25</td>
<td>1.06E-03</td>
<td>6.69E-04</td>
<td>-0.08</td>
<td>0.52</td>
<td>21.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>885.71</td>
<td>265.31</td>
<td>4.47</td>
<td>8.71E-04</td>
<td>6.50E-04</td>
<td>-0.00</td>
<td>0.49</td>
<td>19.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>914.29</td>
<td>275.93</td>
<td>4.67</td>
<td>7.88E-04</td>
<td>5.51E-04</td>
<td>-0.02</td>
<td>0.49</td>
<td>17.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>942.86</td>
<td>286.55</td>
<td>4.86</td>
<td>7.19E-04</td>
<td>5.64E-04</td>
<td>-0.07</td>
<td>0.47</td>
<td>15.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>971.43</td>
<td>297.18</td>
<td>5.06</td>
<td>6.59E-04</td>
<td>5.73E-04</td>
<td>-0.04</td>
<td>0.49</td>
<td>13.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000.00</td>
<td>301.80</td>
<td>5.26</td>
<td>5.99E-04</td>
<td>5.73E-04</td>
<td>-0.04</td>
<td>0.49</td>
<td>11.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST**

\[ \alpha = 0^\circ, \beta = 0^\circ \]

**CONFIG. MA-1**

<table>
<thead>
<tr>
<th>TAU (MSEC)</th>
<th>NRJ(J(TAU))</th>
<th>APII(TAU) + TAU.C(MSEC)</th>
<th>NRJ(J(TAU) + TAU.C) - TAU.C(MSEC)</th>
<th>NRJ(J-TAU.C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>1.72E C1</td>
<td>-0.01</td>
<td>-0.00</td>
<td>1.67E 01</td>
</tr>
<tr>
<td>68</td>
<td>1.72E C1</td>
<td>-0.01</td>
<td>-0.00</td>
<td>1.67E 01</td>
</tr>
<tr>
<td>67</td>
<td>1.67F 01</td>
<td>-0.02</td>
<td>0.01</td>
<td>1.68E 01</td>
</tr>
<tr>
<td>66</td>
<td>1.65E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.65E 01</td>
</tr>
<tr>
<td>65</td>
<td>1.62E 01</td>
<td>-0.02</td>
<td>-0.01</td>
<td>1.62E 01</td>
</tr>
<tr>
<td>64</td>
<td>1.60F 01</td>
<td>0.03</td>
<td>0.01</td>
<td>1.60E 01</td>
</tr>
<tr>
<td>63</td>
<td>1.57E 01</td>
<td>-0.02</td>
<td>-0.01</td>
<td>1.57E 01</td>
</tr>
<tr>
<td>62</td>
<td>1.55F 01</td>
<td>0.03</td>
<td>0.01</td>
<td>1.55E 01</td>
</tr>
<tr>
<td>61</td>
<td>1.52E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.52E 01</td>
</tr>
<tr>
<td>60</td>
<td>1.50F 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.50E 01</td>
</tr>
<tr>
<td>59</td>
<td>1.47F 01</td>
<td>0.02</td>
<td>0.02</td>
<td>1.47E 01</td>
</tr>
<tr>
<td>58</td>
<td>1.45F 01</td>
<td>0.02</td>
<td>0.02</td>
<td>1.45E 01</td>
</tr>
<tr>
<td>57</td>
<td>1.42E 01</td>
<td>-0.02</td>
<td>-0.01</td>
<td>1.42E 01</td>
</tr>
<tr>
<td>56</td>
<td>1.40E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.40E 01</td>
</tr>
<tr>
<td>55</td>
<td>1.37E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.37E 01</td>
</tr>
<tr>
<td>54</td>
<td>1.35F 01</td>
<td>0.02</td>
<td>0.01</td>
<td>1.35E 01</td>
</tr>
<tr>
<td>53</td>
<td>1.32F 01</td>
<td>0.02</td>
<td>0.02</td>
<td>1.32E 01</td>
</tr>
<tr>
<td>52</td>
<td>1.30E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.30E 01</td>
</tr>
<tr>
<td>51</td>
<td>1.27F 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.27E 01</td>
</tr>
<tr>
<td>50</td>
<td>1.25E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.25E 01</td>
</tr>
<tr>
<td>49</td>
<td>1.22E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.22E 01</td>
</tr>
<tr>
<td>48</td>
<td>1.20E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.20E 01</td>
</tr>
<tr>
<td>47</td>
<td>1.17E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.17E 01</td>
</tr>
<tr>
<td>46</td>
<td>1.15E 01</td>
<td>0.02</td>
<td>0.02</td>
<td>1.15E 01</td>
</tr>
<tr>
<td>45</td>
<td>1.12E 01</td>
<td>0.02</td>
<td>0.02</td>
<td>1.12E 01</td>
</tr>
<tr>
<td>44</td>
<td>1.10E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.10E 01</td>
</tr>
<tr>
<td>43</td>
<td>1.07E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.07E 01</td>
</tr>
<tr>
<td>42</td>
<td>1.05E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.05E 01</td>
</tr>
<tr>
<td>41</td>
<td>1.02E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.02E 01</td>
</tr>
<tr>
<td>40</td>
<td>1.00E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>1.00E 00</td>
</tr>
<tr>
<td>39</td>
<td>0.97F 01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.97E 01</td>
</tr>
<tr>
<td>38</td>
<td>0.95E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>0.95E 00</td>
</tr>
<tr>
<td>37</td>
<td>0.93E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>0.93E 00</td>
</tr>
<tr>
<td>36</td>
<td>0.91F 01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.91E 01</td>
</tr>
<tr>
<td>35</td>
<td>0.89E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>0.89E 00</td>
</tr>
<tr>
<td>34</td>
<td>0.87F 00</td>
<td>0.03</td>
<td>0.03</td>
<td>0.87E 00</td>
</tr>
<tr>
<td>33</td>
<td>0.85F 00</td>
<td>0.03</td>
<td>0.03</td>
<td>0.85E 00</td>
</tr>
</tbody>
</table>
### CORRELATION DATA

**TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST**

<table>
<thead>
<tr>
<th>L TAU(MSEC)</th>
<th>NRJ(TAU)</th>
<th>NKII(TAU)</th>
<th>+TAU(CMSEC)</th>
<th>NRII(TAU,+TAU,G)</th>
<th>-TAU(CMSEC)</th>
<th>NRII(-TAU,G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>8.25E-01</td>
<td>0.01</td>
<td>0.00</td>
<td>8.71E-00</td>
<td>0.01</td>
<td>8.79E-00</td>
</tr>
<tr>
<td>32</td>
<td>8.00E-01</td>
<td>-0.00</td>
<td>-0.00</td>
<td>7.46E-00</td>
<td>0.01</td>
<td>8.54E-00</td>
</tr>
<tr>
<td>31</td>
<td>7.75E-01</td>
<td>-0.01</td>
<td>0.01</td>
<td>7.21E-00</td>
<td>0.00</td>
<td>8.29E-00</td>
</tr>
<tr>
<td>30</td>
<td>7.50E-01</td>
<td>-0.00</td>
<td>0.03</td>
<td>6.96E-00</td>
<td>-0.02</td>
<td>8.04E-00</td>
</tr>
<tr>
<td>29</td>
<td>7.25E-01</td>
<td>0.00</td>
<td>0.02</td>
<td>6.71E-00</td>
<td>-0.02</td>
<td>7.79E-00</td>
</tr>
<tr>
<td>28</td>
<td>7.00E-01</td>
<td>0.01</td>
<td>-0.00</td>
<td>6.46E-00</td>
<td>-0.00</td>
<td>7.54E-00</td>
</tr>
<tr>
<td>27</td>
<td>6.75E-01</td>
<td>0.02</td>
<td>-0.01</td>
<td>6.21E-00</td>
<td>-0.01</td>
<td>7.29E-00</td>
</tr>
<tr>
<td>26</td>
<td>6.50E-01</td>
<td>0.03</td>
<td>0.01</td>
<td>5.96E-00</td>
<td>0.02</td>
<td>7.04E-00</td>
</tr>
<tr>
<td>25</td>
<td>6.25E-01</td>
<td>0.02</td>
<td>0.01</td>
<td>5.71E-00</td>
<td>0.02</td>
<td>6.79E-00</td>
</tr>
<tr>
<td>24</td>
<td>6.00E-01</td>
<td>0.00</td>
<td>-0.00</td>
<td>5.46E-00</td>
<td>-0.01</td>
<td>6.54E-00</td>
</tr>
<tr>
<td>23</td>
<td>5.75E-01</td>
<td>-0.02</td>
<td>0.00</td>
<td>5.21E-00</td>
<td>0.01</td>
<td>6.29E-00</td>
</tr>
<tr>
<td>22</td>
<td>5.50E-01</td>
<td>-0.02</td>
<td>0.01</td>
<td>4.96E-00</td>
<td>-0.02</td>
<td>6.04E-00</td>
</tr>
<tr>
<td>21</td>
<td>5.25E-01</td>
<td>0.00</td>
<td>0.02</td>
<td>4.71E-00</td>
<td>0.00</td>
<td>5.79E-00</td>
</tr>
<tr>
<td>20</td>
<td>5.00E-01</td>
<td>0.02</td>
<td>0.01</td>
<td>4.46E-00</td>
<td>0.00</td>
<td>5.54E-00</td>
</tr>
<tr>
<td>19</td>
<td>4.75E-01</td>
<td>0.03</td>
<td>0.01</td>
<td>4.21E-00</td>
<td>0.01</td>
<td>5.29E-00</td>
</tr>
<tr>
<td>18</td>
<td>4.50E-01</td>
<td>0.03</td>
<td>0.01</td>
<td>3.96E-00</td>
<td>0.01</td>
<td>5.04E-00</td>
</tr>
<tr>
<td>17</td>
<td>4.25E-01</td>
<td>0.03</td>
<td>0.01</td>
<td>3.71E-00</td>
<td>0.01</td>
<td>4.79E-00</td>
</tr>
<tr>
<td>16</td>
<td>4.00E-01</td>
<td>0.02</td>
<td>0.01</td>
<td>3.46E-00</td>
<td>0.04</td>
<td>4.54E-00</td>
</tr>
<tr>
<td>15</td>
<td>3.75E-01</td>
<td>0.00</td>
<td>0.00</td>
<td>3.21E-00</td>
<td>0.06</td>
<td>4.29E-00</td>
</tr>
<tr>
<td>14</td>
<td>3.50E-01</td>
<td>-0.02</td>
<td>-0.01</td>
<td>2.96E-00</td>
<td>0.06</td>
<td>4.04E-00</td>
</tr>
<tr>
<td>13</td>
<td>3.25E-01</td>
<td>-0.03</td>
<td>-0.01</td>
<td>2.71E-00</td>
<td>0.02</td>
<td>3.79E-00</td>
</tr>
<tr>
<td>12</td>
<td>3.00E-01</td>
<td>-0.01</td>
<td>0.02</td>
<td>2.46E-00</td>
<td>-0.07</td>
<td>3.54E-00</td>
</tr>
<tr>
<td>11</td>
<td>2.75E-01</td>
<td>0.02</td>
<td>0.03</td>
<td>2.21E-00</td>
<td>-0.16</td>
<td>3.29E-00</td>
</tr>
<tr>
<td>10</td>
<td>2.50E-01</td>
<td>0.05</td>
<td>0.04</td>
<td>1.96E-00</td>
<td>-0.17</td>
<td>3.04E-00</td>
</tr>
<tr>
<td>9</td>
<td>2.25E-01</td>
<td>0.05</td>
<td>0.04</td>
<td>1.71E-00</td>
<td>-0.08</td>
<td>2.79E-00</td>
</tr>
<tr>
<td>8</td>
<td>2.00E-01</td>
<td>0.03</td>
<td>0.03</td>
<td>1.46E-00</td>
<td>0.00</td>
<td>2.54E-00</td>
</tr>
<tr>
<td>7</td>
<td>1.75E-01</td>
<td>-0.01</td>
<td>0.04</td>
<td>1.21E-00</td>
<td>0.11</td>
<td>2.29E-00</td>
</tr>
<tr>
<td>6</td>
<td>1.50E-01</td>
<td>-0.06</td>
<td>0.03</td>
<td>9.54E-01</td>
<td>0.06</td>
<td>2.04E-00</td>
</tr>
<tr>
<td>5</td>
<td>1.25E-01</td>
<td>-0.12</td>
<td>-0.01</td>
<td>7.07E-01</td>
<td>0.01</td>
<td>1.79E-00</td>
</tr>
<tr>
<td>4</td>
<td>1.00E-01</td>
<td>-0.17</td>
<td>-0.02</td>
<td>4.59E-01</td>
<td>-0.02</td>
<td>1.54E-00</td>
</tr>
<tr>
<td>3</td>
<td>7.50E-01</td>
<td>-0.12</td>
<td>-0.05</td>
<td>2.09E-01</td>
<td>-0.03</td>
<td>1.29E-00</td>
</tr>
<tr>
<td>2</td>
<td>5.00E-01</td>
<td>0.14</td>
<td>0.00</td>
<td>-4.10E-02</td>
<td>-0.03</td>
<td>1.04E-00</td>
</tr>
<tr>
<td>1</td>
<td>2.50E-01</td>
<td>0.68</td>
<td>0.55</td>
<td>-2.91E-01</td>
<td>-0.01</td>
<td>7.61E-01</td>
</tr>
<tr>
<td>0</td>
<td>0.00</td>
<td>1.00</td>
<td>1.00</td>
<td>-5.41E-01</td>
<td>0.00</td>
<td>5.41E-01</td>
</tr>
</tbody>
</table>
### 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-C, Part No. = 17-3, J = 6, I = 9

<table>
<thead>
<tr>
<th>Model</th>
<th>Prototype Reduced S.F. XSJ(E)</th>
<th>Prototype Reduced S.F. XSL(E)</th>
<th>NC1J(E)</th>
<th>NC1J(F)</th>
<th>MCD. CF Phase of</th>
<th>Coher.</th>
</tr>
</thead>
<tbody>
<tr>
<td>64.27</td>
<td>0.28</td>
<td>1.56E-03</td>
<td>-0.06</td>
<td>-0.04</td>
<td>-0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>114.29</td>
<td>34.49</td>
<td>2.14E-03</td>
<td>-0.09</td>
<td>-0.07</td>
<td>-0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>142.86</td>
<td>43.11</td>
<td>2.60E-03</td>
<td>-0.03</td>
<td>-0.01</td>
<td>-0.00</td>
<td>0.06</td>
</tr>
<tr>
<td>171.43</td>
<td>51.74</td>
<td>1.78E-03</td>
<td>-0.07</td>
<td>-0.05</td>
<td>-0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>228.57</td>
<td>68.58</td>
<td>2.14E-03</td>
<td>-0.12</td>
<td>-0.09</td>
<td>-0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>257.14</td>
<td>77.61</td>
<td>1.56E-03</td>
<td>-0.21</td>
<td>-0.19</td>
<td>-0.17</td>
<td>0.19</td>
</tr>
<tr>
<td>285.71</td>
<td>86.23</td>
<td>2.14E-03</td>
<td>-0.20</td>
<td>-0.18</td>
<td>-0.16</td>
<td>0.19</td>
</tr>
<tr>
<td>314.29</td>
<td>56.34</td>
<td>2.14E-03</td>
<td>-0.11</td>
<td>-0.09</td>
<td>-0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>342.86</td>
<td>103.47</td>
<td>3.18E-03</td>
<td>-0.03</td>
<td>-0.01</td>
<td>-0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>371.43</td>
<td>112.10</td>
<td>3.27E-03</td>
<td>-0.07</td>
<td>-0.05</td>
<td>-0.03</td>
<td>0.05</td>
</tr>
<tr>
<td>400.00</td>
<td>120.72</td>
<td>3.51E-03</td>
<td>-0.22</td>
<td>-0.19</td>
<td>-0.17</td>
<td>0.18</td>
</tr>
<tr>
<td>428.57</td>
<td>129.34</td>
<td>3.89E-03</td>
<td>-0.34</td>
<td>-0.31</td>
<td>-0.29</td>
<td>0.31</td>
</tr>
<tr>
<td>457.14</td>
<td>137.97</td>
<td>3.90E-03</td>
<td>-0.37</td>
<td>-0.34</td>
<td>-0.31</td>
<td>0.33</td>
</tr>
<tr>
<td>485.71</td>
<td>146.55</td>
<td>3.43E-03</td>
<td>-0.35</td>
<td>-0.32</td>
<td>-0.30</td>
<td>0.32</td>
</tr>
<tr>
<td>514.29</td>
<td>155.21</td>
<td>2.35E-03</td>
<td>-0.27</td>
<td>-0.24</td>
<td>-0.21</td>
<td>0.22</td>
</tr>
<tr>
<td>542.86</td>
<td>163.83</td>
<td>2.51E-03</td>
<td>-0.20</td>
<td>-0.17</td>
<td>-0.15</td>
<td>0.16</td>
</tr>
<tr>
<td>571.43</td>
<td>172.46</td>
<td>2.39E-03</td>
<td>-0.14</td>
<td>-0.12</td>
<td>-0.10</td>
<td>0.11</td>
</tr>
<tr>
<td>600.00</td>
<td>181.02</td>
<td>2.29E-03</td>
<td>-0.06</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>628.57</td>
<td>189.73</td>
<td>2.05E-03</td>
<td>-0.06</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>657.14</td>
<td>198.33</td>
<td>1.75E-03</td>
<td>-0.15</td>
<td>-0.13</td>
<td>-0.11</td>
<td>0.12</td>
</tr>
<tr>
<td>685.71</td>
<td>206.05</td>
<td>1.67E-03</td>
<td>-0.16</td>
<td>-0.14</td>
<td>-0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>714.29</td>
<td>214.69</td>
<td>1.54E-03</td>
<td>-0.20</td>
<td>-0.17</td>
<td>-0.15</td>
<td>0.16</td>
</tr>
<tr>
<td>742.86</td>
<td>224.19</td>
<td>1.41E-03</td>
<td>-0.24</td>
<td>-0.21</td>
<td>-0.18</td>
<td>0.19</td>
</tr>
<tr>
<td>771.43</td>
<td>233.62</td>
<td>1.44E-03</td>
<td>-0.28</td>
<td>-0.25</td>
<td>-0.23</td>
<td>0.24</td>
</tr>
<tr>
<td>800.00</td>
<td>243.14</td>
<td>1.41E-03</td>
<td>-0.23</td>
<td>-0.21</td>
<td>-0.19</td>
<td>0.21</td>
</tr>
<tr>
<td>828.57</td>
<td>250.06</td>
<td>1.20E-03</td>
<td>-0.28</td>
<td>-0.25</td>
<td>-0.23</td>
<td>0.24</td>
</tr>
<tr>
<td>857.14</td>
<td>258.69</td>
<td>9.51E-04</td>
<td>-0.01</td>
<td>-0.00</td>
<td>-0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>885.71</td>
<td>267.31</td>
<td>8.07E-04</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>914.29</td>
<td>275.93</td>
<td>7.65E-04</td>
<td>-0.05</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>942.86</td>
<td>234.55</td>
<td>7.42E-04</td>
<td>-0.07</td>
<td>-0.06</td>
<td>-0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>971.43</td>
<td>293.18</td>
<td>6.35E-04</td>
<td>-0.09</td>
<td>-0.08</td>
<td>-0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>1000.00</td>
<td>301.80</td>
<td>5.37E-04</td>
<td>-0.10</td>
<td>-0.09</td>
<td>-0.08</td>
<td>0.09</td>
</tr>
</tbody>
</table>

**Note:** The table represents various frequencies and associated data for spectral analysis, with different models and configurations.
### TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

#### CONFIG. MA-1

- $\alpha = 0^\circ$, $\beta = 0^\circ$
- $\text{MACH} = 1.0$
- $\text{Tape No.} = 5.0$
- $\text{PART No.} = 12.3$
- $J = 8$, $I = 9$

#### Data Table

<table>
<thead>
<tr>
<th>$\tau$ (msec)</th>
<th>$\text{ARRI}(\tau)$</th>
<th>$\text{ARRI}(\tau) + \text{TAU}_C\text{(msec)}$</th>
<th>$\text{ARRI}(\tau) - \text{TAU}_C\text{(msec)}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>1.75E+01</td>
<td>1.70E+01</td>
<td>1.70E+01</td>
</tr>
<tr>
<td>69</td>
<td>1.72E+01</td>
<td>1.67E+01</td>
<td>1.67E+01</td>
</tr>
<tr>
<td>68</td>
<td>1.70E+01</td>
<td>1.65E+01</td>
<td>1.65E+01</td>
</tr>
<tr>
<td>67</td>
<td>1.67E+01</td>
<td>1.62E+01</td>
<td>1.62E+01</td>
</tr>
<tr>
<td>66</td>
<td>1.65E+01</td>
<td>1.60E+01</td>
<td>1.60E+01</td>
</tr>
<tr>
<td>65</td>
<td>1.62E+01</td>
<td>1.57E+01</td>
<td>1.57E+01</td>
</tr>
<tr>
<td>64</td>
<td>1.60E+01</td>
<td>1.55E+01</td>
<td>1.55E+01</td>
</tr>
<tr>
<td>63</td>
<td>1.57E+01</td>
<td>1.52E+01</td>
<td>1.52E+01</td>
</tr>
<tr>
<td>62</td>
<td>1.55E+01</td>
<td>1.50E+01</td>
<td>1.50E+01</td>
</tr>
<tr>
<td>61</td>
<td>1.52E+01</td>
<td>1.47E+01</td>
<td>1.47E+01</td>
</tr>
<tr>
<td>60</td>
<td>1.50E+01</td>
<td>1.45E+01</td>
<td>1.45E+01</td>
</tr>
<tr>
<td>59</td>
<td>1.47E+01</td>
<td>1.42E+01</td>
<td>1.42E+01</td>
</tr>
<tr>
<td>58</td>
<td>1.45E+01</td>
<td>1.40E+01</td>
<td>1.40E+01</td>
</tr>
<tr>
<td>57</td>
<td>1.42E+01</td>
<td>1.37E+01</td>
<td>1.37E+01</td>
</tr>
<tr>
<td>56</td>
<td>1.40E+01</td>
<td>1.35E+01</td>
<td>1.35E+01</td>
</tr>
<tr>
<td>55</td>
<td>1.37E+01</td>
<td>1.32E+01</td>
<td>1.32E+01</td>
</tr>
<tr>
<td>54</td>
<td>1.35E+01</td>
<td>1.30E+01</td>
<td>1.30E+01</td>
</tr>
<tr>
<td>53</td>
<td>1.32E+01</td>
<td>1.27E+01</td>
<td>1.27E+01</td>
</tr>
<tr>
<td>52</td>
<td>1.30E+01</td>
<td>1.25E+01</td>
<td>1.25E+01</td>
</tr>
<tr>
<td>51</td>
<td>1.27E+01</td>
<td>1.22E+01</td>
<td>1.22E+01</td>
</tr>
<tr>
<td>50</td>
<td>1.25E+01</td>
<td>1.20E+01</td>
<td>1.20E+01</td>
</tr>
<tr>
<td>49</td>
<td>1.22E+01</td>
<td>1.17E+01</td>
<td>1.17E+01</td>
</tr>
<tr>
<td>48</td>
<td>1.20E+01</td>
<td>1.15E+01</td>
<td>1.15E+01</td>
</tr>
<tr>
<td>47</td>
<td>1.17E+01</td>
<td>1.12E+01</td>
<td>1.12E+01</td>
</tr>
<tr>
<td>46</td>
<td>1.15E+01</td>
<td>1.10E+01</td>
<td>1.10E+01</td>
</tr>
<tr>
<td>45</td>
<td>1.12E+01</td>
<td>1.07E+01</td>
<td>1.07E+01</td>
</tr>
<tr>
<td>44</td>
<td>1.10E+01</td>
<td>1.05E+01</td>
<td>1.05E+01</td>
</tr>
<tr>
<td>43</td>
<td>1.07E+01</td>
<td>1.01E+01</td>
<td>1.01E+01</td>
</tr>
<tr>
<td>42</td>
<td>1.05E+01</td>
<td>9.97E+00</td>
<td>9.97E+00</td>
</tr>
<tr>
<td>41</td>
<td>1.02E+01</td>
<td>9.77E+00</td>
<td>9.77E+00</td>
</tr>
<tr>
<td>40</td>
<td>9.97E+00</td>
<td>9.67E+00</td>
<td>9.67E+00</td>
</tr>
<tr>
<td>39</td>
<td>9.87E+00</td>
<td>9.47E+00</td>
<td>9.47E+00</td>
</tr>
<tr>
<td>38</td>
<td>9.75E+00</td>
<td>9.22E+00</td>
<td>9.22E+00</td>
</tr>
<tr>
<td>37</td>
<td>9.95E+00</td>
<td>9.72E+00</td>
<td>9.72E+00</td>
</tr>
<tr>
<td>36</td>
<td>9.05E+00</td>
<td>8.47E+00</td>
<td>8.47E+00</td>
</tr>
<tr>
<td>35</td>
<td>8.75E+00</td>
<td>8.22E+00</td>
<td>8.22E+00</td>
</tr>
<tr>
<td>34</td>
<td>8.57E+00</td>
<td>7.57E+00</td>
<td>7.57E+00</td>
</tr>
</tbody>
</table>
### TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

- **Q = 0°, B = 0°**
- **CONFIG. MA-1**
- **MACR NO. = 1.0**
- **TAPE NU. = 5.0**
- **PART NO. = 5.123**
- **J = 8**
- **I = 9**
- **RIJ(0) = 5.4974E-01**
- **RIII(0) = 5.5939E-01**

<table>
<thead>
<tr>
<th>L (TAU(MSEC))</th>
<th>RIIJ(TAU)</th>
<th>RII(TAU)</th>
<th>+TAU,C(MSEC)</th>
<th>RIIJ(TAU+C)</th>
<th>-TAU,C(MSEC)</th>
<th>RIIJ(-TAU+C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 8.25E CC</td>
<td>-0.01</td>
<td>0.01</td>
<td>7.72E CC</td>
<td>-0.02</td>
<td>8.78E CC</td>
<td>-0.01</td>
</tr>
<tr>
<td>32 8.00E CC</td>
<td>-0.01</td>
<td>0.01</td>
<td>7.47E CC</td>
<td>0.00</td>
<td>8.03E CC</td>
<td>-0.02</td>
</tr>
<tr>
<td>31 7.75E CC</td>
<td>-0.01</td>
<td>0.01</td>
<td>7.22E CC</td>
<td>0.01</td>
<td>8.28E CC</td>
<td>-0.02</td>
</tr>
<tr>
<td>30 7.50E CC</td>
<td>-0.01</td>
<td>0.01</td>
<td>6.97E CC</td>
<td>-0.02</td>
<td>8.03E CC</td>
<td>-0.02</td>
</tr>
<tr>
<td>29 7.25E CC</td>
<td>0.01</td>
<td>0.02</td>
<td>6.72E CC</td>
<td>0.00</td>
<td>7.78E CC</td>
<td>-0.01</td>
</tr>
<tr>
<td>28 7.00E CC</td>
<td>0.02</td>
<td>0.01</td>
<td>6.47E CC</td>
<td>-0.01</td>
<td>7.53E CC</td>
<td>-0.02</td>
</tr>
<tr>
<td>27 6.75E CC</td>
<td>0.02</td>
<td>0.01</td>
<td>6.22E CC</td>
<td>0.00</td>
<td>7.28E CC</td>
<td>-0.01</td>
</tr>
<tr>
<td>26 6.50E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>5.97E CC</td>
<td>0.01</td>
<td>7.03E CC</td>
<td>-0.00</td>
</tr>
<tr>
<td>25 6.00E CC</td>
<td>-0.01</td>
<td>0.01</td>
<td>5.72E CC</td>
<td>0.00</td>
<td>6.78E CC</td>
<td>-0.01</td>
</tr>
<tr>
<td>24 5.75E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>5.47E CC</td>
<td>-0.01</td>
<td>6.53E CC</td>
<td>-0.01</td>
</tr>
<tr>
<td>23 5.50E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>5.22E CC</td>
<td>0.00</td>
<td>6.28E CC</td>
<td>-0.01</td>
</tr>
<tr>
<td>22 5.25E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>4.97E CC</td>
<td>-0.01</td>
<td>6.03E CC</td>
<td>0.00</td>
</tr>
<tr>
<td>21 5.00E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>4.72E CC</td>
<td>0.00</td>
<td>5.78E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>20 4.75E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>4.47E CC</td>
<td>0.00</td>
<td>5.53E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>19 4.50E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>4.22E CC</td>
<td>0.00</td>
<td>5.28E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>18 4.25E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>3.97E CC</td>
<td>0.01</td>
<td>5.03E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>17 4.00E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>3.72E CC</td>
<td>0.02</td>
<td>4.78E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>16 3.75E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>3.47E CC</td>
<td>0.02</td>
<td>4.53E CC</td>
<td>0.00</td>
</tr>
<tr>
<td>15 3.50E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>3.22E CC</td>
<td>0.01</td>
<td>4.28E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>14 3.25E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>2.97E CC</td>
<td>0.01</td>
<td>4.03E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>13 3.00E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>2.72E CC</td>
<td>0.00</td>
<td>3.78E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>12 2.75E CC</td>
<td>0.01</td>
<td>0.01</td>
<td>2.47E CC</td>
<td>0.02</td>
<td>3.53E CC</td>
<td>0.00</td>
</tr>
<tr>
<td>11 2.50E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>2.22E CC</td>
<td>0.01</td>
<td>3.28E CC</td>
<td>0.00</td>
</tr>
<tr>
<td>10 2.25E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>1.97E CC</td>
<td>0.01</td>
<td>3.03E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>9 2.00E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>1.72E CC</td>
<td>0.01</td>
<td>2.78E CC</td>
<td>0.00</td>
</tr>
<tr>
<td>8 1.75E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>1.47E CC</td>
<td>0.01</td>
<td>2.53E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>7 1.50E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>1.22E CC</td>
<td>0.01</td>
<td>2.28E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>6 1.25E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>0.98E-01</td>
<td>0.01</td>
<td>2.03E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>5 1.00E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>0.74E-01</td>
<td>0.01</td>
<td>1.78E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>4 0.75E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>0.50E-01</td>
<td>0.01</td>
<td>1.53E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>3 0.50E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>0.26E-01</td>
<td>0.01</td>
<td>1.28E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>2 0.25E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>0.00E-01</td>
<td>0.01</td>
<td>1.03E CC</td>
<td>0.01</td>
</tr>
<tr>
<td>1 0.00E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>-3.52E-01</td>
<td>0.02</td>
<td>7.82E-01</td>
<td>0.00</td>
</tr>
<tr>
<td>0 0.00E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>-5.32E-01</td>
<td>0.00</td>
<td>5.32E-01</td>
<td>0.00</td>
</tr>
</tbody>
</table>
**TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST**

α = 0°, β = 0°

**CONFIG. MA-1**  MACH NO. = 1.0  TAPE NO. = 5.0  PART NO. = 17.3  J = 8  I = 9

**MCDONNELL FREQ. S.F. = 2.98**  **PROTOTYPE FREQ. S.F. = 2.73**  **REDUCED FREQ. S.F. = 1.00**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>prototype</th>
<th>REDUCED S.F.</th>
<th>XSJII(F) S.F.</th>
<th>XSJII(F) NCIJ(F)</th>
<th>NCIJ(F) MCD.</th>
<th>CF PHASE OF</th>
<th>FREQ.</th>
<th>FREQ.</th>
<th>FREQ.</th>
<th>COHER.</th>
<th>COHER.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.</td>
<td>0.</td>
<td>0.</td>
<td>7.70E-04</td>
<td>1.03E-03</td>
<td>0.13</td>
<td>0.13</td>
<td>360.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.57</td>
<td>8.62</td>
<td>0.14</td>
<td>1.59E-03</td>
<td>2.02E-03</td>
<td>0.17</td>
<td>0.12</td>
<td>36.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57.14</td>
<td>17.25</td>
<td>0.28</td>
<td>1.64E-03</td>
<td>1.53E-03</td>
<td>0.19</td>
<td>0.21</td>
<td>46.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85.71</td>
<td>25.87</td>
<td>0.43</td>
<td>1.68E-03</td>
<td>1.77E-03</td>
<td>0.10</td>
<td>0.24</td>
<td>66.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>114.29</td>
<td>34.45</td>
<td>0.57</td>
<td>1.71E-03</td>
<td>1.62E-03</td>
<td>0.01</td>
<td>0.30</td>
<td>88.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>142.86</td>
<td>43.11</td>
<td>0.71</td>
<td>1.75E-03</td>
<td>1.52E-03</td>
<td>0.36</td>
<td>0.36</td>
<td>99.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.43</td>
<td>51.74</td>
<td>0.85</td>
<td>1.79E-03</td>
<td>1.39E-03</td>
<td>0.37</td>
<td>0.37</td>
<td>92.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200.00</td>
<td>60.36</td>
<td>0.99</td>
<td>1.83E-03</td>
<td>1.28E-03</td>
<td>0.35</td>
<td>0.35</td>
<td>51.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>228.57</td>
<td>69.58</td>
<td>1.13</td>
<td>1.86E-03</td>
<td>1.28E-03</td>
<td>0.33</td>
<td>0.33</td>
<td>97.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>257.14</td>
<td>77.61</td>
<td>1.26</td>
<td>1.89E-03</td>
<td>1.39E-03</td>
<td>0.31</td>
<td>0.31</td>
<td>109.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>285.71</td>
<td>86.23</td>
<td>1.42</td>
<td>1.90E-03</td>
<td>1.47E-03</td>
<td>0.31</td>
<td>0.31</td>
<td>129.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>314.26</td>
<td>94.85</td>
<td>1.56</td>
<td>1.93E-03</td>
<td>1.54E-03</td>
<td>0.34</td>
<td>0.34</td>
<td>144.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>342.86</td>
<td>103.47</td>
<td>1.70</td>
<td>1.95E-03</td>
<td>1.72E-03</td>
<td>0.33</td>
<td>0.33</td>
<td>157.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>371.43</td>
<td>112.10</td>
<td>1.84</td>
<td>1.98E-03</td>
<td>1.79E-03</td>
<td>0.35</td>
<td>0.35</td>
<td>164.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400.00</td>
<td>120.72</td>
<td>1.98</td>
<td>2.01E-03</td>
<td>1.68E-03</td>
<td>0.40</td>
<td>0.40</td>
<td>173.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.57</td>
<td>129.34</td>
<td>2.13</td>
<td>2.04E-03</td>
<td>1.61E-03</td>
<td>0.43</td>
<td>0.43</td>
<td>177.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>457.14</td>
<td>137.57</td>
<td>2.27</td>
<td>2.07E-03</td>
<td>1.61E-03</td>
<td>0.43</td>
<td>0.43</td>
<td>180.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>495.71</td>
<td>145.65</td>
<td>2.41</td>
<td>2.10E-03</td>
<td>1.56E-03</td>
<td>0.37</td>
<td>0.37</td>
<td>184.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>514.29</td>
<td>153.21</td>
<td>2.55</td>
<td>2.13E-03</td>
<td>1.58E-03</td>
<td>0.36</td>
<td>0.36</td>
<td>186.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>542.86</td>
<td>161.83</td>
<td>2.66</td>
<td>2.15E-03</td>
<td>1.57E-03</td>
<td>0.31</td>
<td>0.31</td>
<td>189.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>571.43</td>
<td>170.46</td>
<td>2.79</td>
<td>2.17E-03</td>
<td>1.79E-03</td>
<td>0.27</td>
<td>0.27</td>
<td>211.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600.00</td>
<td>179.12</td>
<td>3.02</td>
<td>2.20E-03</td>
<td>1.79E-03</td>
<td>0.30</td>
<td>0.27</td>
<td>215.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>628.57</td>
<td>189.76</td>
<td>3.36</td>
<td>2.23E-03</td>
<td>1.38E-03</td>
<td>0.29</td>
<td>0.16</td>
<td>264.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>657.14</td>
<td>199.33</td>
<td>3.72</td>
<td>2.26E-03</td>
<td>1.38E-03</td>
<td>0.22</td>
<td>0.22</td>
<td>283.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>685.71</td>
<td>208.95</td>
<td>3.94</td>
<td>2.29E-03</td>
<td>1.47E-03</td>
<td>0.16</td>
<td>0.22</td>
<td>297.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>714.25</td>
<td>218.57</td>
<td>4.16</td>
<td>2.32E-03</td>
<td>1.49E-03</td>
<td>0.14</td>
<td>0.22</td>
<td>301.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>742.86</td>
<td>228.15</td>
<td>4.38</td>
<td>2.36E-03</td>
<td>1.35E-03</td>
<td>0.14</td>
<td>0.27</td>
<td>305.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>771.43</td>
<td>237.82</td>
<td>4.60</td>
<td>2.40E-03</td>
<td>1.39E-03</td>
<td>0.12</td>
<td>0.35</td>
<td>311.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800.00</td>
<td>247.44</td>
<td>4.82</td>
<td>2.44E-03</td>
<td>1.51E-03</td>
<td>0.14</td>
<td>0.35</td>
<td>316.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>828.57</td>
<td>255.06</td>
<td>5.14</td>
<td>2.48E-03</td>
<td>1.51E-03</td>
<td>0.12</td>
<td>0.35</td>
<td>321.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>857.14</td>
<td>263.65</td>
<td>5.45</td>
<td>2.52E-03</td>
<td>1.53E-03</td>
<td>0.16</td>
<td>0.16</td>
<td>320.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>885.71</td>
<td>272.31</td>
<td>5.76</td>
<td>2.55E-03</td>
<td>1.54E-03</td>
<td>0.16</td>
<td>0.16</td>
<td>320.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>914.29</td>
<td>280.93</td>
<td>6.07</td>
<td>2.58E-03</td>
<td>1.55E-03</td>
<td>0.16</td>
<td>0.16</td>
<td>320.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>942.86</td>
<td>289.55</td>
<td>6.38</td>
<td>2.61E-03</td>
<td>1.56E-03</td>
<td>0.16</td>
<td>0.16</td>
<td>320.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>971.43</td>
<td>298.18</td>
<td>6.70</td>
<td>2.64E-03</td>
<td>1.57E-03</td>
<td>0.16</td>
<td>0.16</td>
<td>320.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000.00</td>
<td>301.80</td>
<td>7.02</td>
<td>2.67E-03</td>
<td>1.57E-03</td>
<td>0.16</td>
<td>0.16</td>
<td>320.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spectral Data**

DATE  30 April 1965

MACH NO. = 1.0  TAPE NO. = 5.0  PART NO. = 17.3  J = 8  I = 9

MCDONNELL FREQ. S.F. = 2.98  PROTOTYPE FREQ. S.F. = 2.73  REDUCED FREQ. S.F. = 1.00
# TULLAHOMA 32 PERCENT MERCURY

## FLUCTUATING PRESSURE TEST

\[ \alpha = 0^\circ, \beta = 0^\circ \]

**CONFIG. MA-1**

<table>
<thead>
<tr>
<th>TAU (MSEC)</th>
<th>NRJ (TAU)</th>
<th>ARJ (TAU)</th>
<th>TAU, C (MSEC)</th>
<th>ARJ (TAU, C)</th>
<th>ARJ (TAN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>1.75E 01</td>
<td>0.01</td>
<td>1.65E 01</td>
<td>-0.01</td>
<td>1.01E 01</td>
</tr>
<tr>
<td>69</td>
<td>1.72E 01</td>
<td>0.02</td>
<td>1.67E 01</td>
<td>0.01</td>
<td>1.78E 01</td>
</tr>
<tr>
<td>68</td>
<td>1.70E 01</td>
<td>0.02</td>
<td>1.64E 01</td>
<td>0.01</td>
<td>1.76E 01</td>
</tr>
<tr>
<td>67</td>
<td>1.67E 01</td>
<td>0.00</td>
<td>1.62E 01</td>
<td>0.00</td>
<td>1.73E 01</td>
</tr>
<tr>
<td>66</td>
<td>1.60E 01</td>
<td>-0.01</td>
<td>1.55E 01</td>
<td>-0.02</td>
<td>1.68E 01</td>
</tr>
<tr>
<td>65</td>
<td>1.62E 01</td>
<td>-0.01</td>
<td>1.57E 01</td>
<td>-0.02</td>
<td>1.66E 01</td>
</tr>
<tr>
<td>64</td>
<td>1.60E 01</td>
<td>-0.01</td>
<td>1.56E 01</td>
<td>-0.02</td>
<td>1.66E 01</td>
</tr>
<tr>
<td>63</td>
<td>1.57E 01</td>
<td>-0.01</td>
<td>1.52E 01</td>
<td>0.00</td>
<td>1.63E 01</td>
</tr>
<tr>
<td>62</td>
<td>1.55E 01</td>
<td>-0.00</td>
<td>1.49E 01</td>
<td>0.00</td>
<td>1.61E 01</td>
</tr>
<tr>
<td>61</td>
<td>1.52E 01</td>
<td>0.00</td>
<td>1.47E 01</td>
<td>0.00</td>
<td>1.58E 01</td>
</tr>
<tr>
<td>60</td>
<td>1.50E 01</td>
<td>0.00</td>
<td>1.44E 01</td>
<td>0.00</td>
<td>1.56E 01</td>
</tr>
<tr>
<td>59</td>
<td>1.47E 01</td>
<td>0.00</td>
<td>1.42E 01</td>
<td>0.00</td>
<td>1.53E 01</td>
</tr>
<tr>
<td>58</td>
<td>1.45E 01</td>
<td>0.00</td>
<td>1.39E 01</td>
<td>0.00</td>
<td>1.51E 01</td>
</tr>
<tr>
<td>57</td>
<td>1.42E 01</td>
<td>0.00</td>
<td>1.37E 01</td>
<td>0.00</td>
<td>1.48E 01</td>
</tr>
<tr>
<td>56</td>
<td>1.40E 01</td>
<td>-0.00</td>
<td>1.34E 01</td>
<td>-0.00</td>
<td>1.46E 01</td>
</tr>
<tr>
<td>55</td>
<td>1.37E 01</td>
<td>-0.01</td>
<td>1.32E 01</td>
<td>0.00</td>
<td>1.43E 01</td>
</tr>
<tr>
<td>54</td>
<td>1.35E 01</td>
<td>-0.02</td>
<td>1.29E 01</td>
<td>0.01</td>
<td>1.41E 01</td>
</tr>
<tr>
<td>53</td>
<td>1.32E 01</td>
<td>-0.01</td>
<td>1.27E 01</td>
<td>0.00</td>
<td>1.38E 01</td>
</tr>
<tr>
<td>52</td>
<td>1.30E 01</td>
<td>0.00</td>
<td>1.24E 01</td>
<td>0.01</td>
<td>1.36E 01</td>
</tr>
<tr>
<td>51</td>
<td>1.27E 01</td>
<td>0.00</td>
<td>1.22E 01</td>
<td>-0.03</td>
<td>1.33E 01</td>
</tr>
<tr>
<td>50</td>
<td>1.25E 01</td>
<td>0.01</td>
<td>1.19E 01</td>
<td>-0.02</td>
<td>1.31E 01</td>
</tr>
<tr>
<td>49</td>
<td>1.22E 01</td>
<td>0.01</td>
<td>1.17E 01</td>
<td>-0.01</td>
<td>1.28E 01</td>
</tr>
<tr>
<td>48</td>
<td>1.20E 01</td>
<td>0.02</td>
<td>1.14E 01</td>
<td>-0.01</td>
<td>1.26E 01</td>
</tr>
<tr>
<td>47</td>
<td>1.17E 01</td>
<td>0.00</td>
<td>1.12E 01</td>
<td>-0.01</td>
<td>1.23E 01</td>
</tr>
<tr>
<td>46</td>
<td>1.15E 01</td>
<td>0.00</td>
<td>1.09E 01</td>
<td>-0.00</td>
<td>1.21E 01</td>
</tr>
<tr>
<td>45</td>
<td>1.12E 01</td>
<td>0.00</td>
<td>1.07E 01</td>
<td>0.00</td>
<td>1.18E 01</td>
</tr>
<tr>
<td>44</td>
<td>1.10E 01</td>
<td>0.00</td>
<td>1.06E 01</td>
<td>0.00</td>
<td>1.16E 01</td>
</tr>
<tr>
<td>43</td>
<td>1.07E 01</td>
<td>0.02</td>
<td>1.07E 01</td>
<td>-0.01</td>
<td>1.13E 01</td>
</tr>
<tr>
<td>42</td>
<td>1.04E 01</td>
<td>0.00</td>
<td>1.04E 01</td>
<td>0.00</td>
<td>1.11E 01</td>
</tr>
<tr>
<td>41</td>
<td>1.04E 01</td>
<td>0.00</td>
<td>1.04E 01</td>
<td>0.00</td>
<td>1.11E 01</td>
</tr>
<tr>
<td>40</td>
<td>1.00E 00</td>
<td>0.00</td>
<td>9.93E 00</td>
<td>0.00</td>
<td>1.06E 01</td>
</tr>
<tr>
<td>39</td>
<td>9.75E 00</td>
<td>-0.00</td>
<td>9.20E 00</td>
<td>-0.02</td>
<td>1.03E 01</td>
</tr>
<tr>
<td>38</td>
<td>9.50E 00</td>
<td>-0.01</td>
<td>8.97E 00</td>
<td>-0.02</td>
<td>9.80E 00</td>
</tr>
<tr>
<td>37</td>
<td>9.25E 00</td>
<td>-0.01</td>
<td>8.70E 00</td>
<td>-0.02</td>
<td>9.55E 00</td>
</tr>
<tr>
<td>36</td>
<td>9.00E 00</td>
<td>-0.00</td>
<td>8.45E 00</td>
<td>-0.01</td>
<td>9.30E 00</td>
</tr>
<tr>
<td>35</td>
<td>8.75E 00</td>
<td>0.01</td>
<td>8.20E 00</td>
<td>0.00</td>
<td>9.30E 00</td>
</tr>
<tr>
<td>34</td>
<td>8.50E 00</td>
<td>0.01</td>
<td>7.95E 00</td>
<td>0.01</td>
<td>9.05E 00</td>
</tr>
</tbody>
</table>
**MCDONNELL**

**ST. LOUIS, MISSOURI**

**DATE** 30 April 1965

**RSVISED REPORT 3661**

**CORRELATION DATA**

**TULLAHLEMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST**

\[
\begin{align*}
\alpha &= 0^\circ, \beta &= 0^\circ \\
\text{CONFIG. MA-1} & \quad \text{MACH NO.} = 1.2 \quad \text{TAPF NO.} = 5.0 \quad \text{PART NO.} = 13.3 \quad J = 6 \quad I = 7 \\
\end{align*}
\]

\[
\begin{array}{cccccc}
\text{L} & \text{TAU(MSEC)} & \text{NIJI(TAU)} & \text{NIJI(TAU)} + \text{TAU,C(MSEC)} & \text{NIJI(TAU,C) - TAU,C(MSEC)} & \text{NIJI(-TAU,C)} \\
33 & 8.75E 00 & 0.02 & 0.01 & 7.75E 00 & 0.01 & 8.80E 00 & 0.00 \\
32 & 8.60E 00 & 0.02 & 0.02 & 7.45E 00 & -0.02 & 8.55E 00 & 0.00 \\
31 & 7.75E 00 & 0.02 & 0.02 & 7.25E 00 & 0.02 & 8.30E 00 & 0.00 \\
30 & 7.50E 00 & 0.01 & 0.02 & 6.95E 00 & -0.04 & 8.05E 00 & 0.00 \\
29 & 7.75E 00 & 0.01 & 0.02 & 6.75E 00 & -0.03 & 7.80E 00 & 0.00 \\
28 & 7.50E 00 & 0.01 & 0.03 & 6.45E 00 & -0.02 & 7.55E 00 & 0.01 \\
27 & 6.75E 00 & 0.01 & 0.03 & 6.25E 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 & 0.01 & -0.01 & 5.45E 00 & 0.02 & 6.55E 00 & 0.01 \\
23 & 5.75E 00 & 0.01 & -0.01 & 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 & 4.75E 00 & 0.01 & 5.80E 00 & 0.01 \\
20 & 5.00E 00 & -0.01 & 0.01 & 4.55E 00 & 0.01 & 5.55E 00 & 0.01 \\
19 & 4.75E 00 & -0.01 & 0.01 & 4.25E 00 & 0.01 & 5.30E 00 & 0.01 \\
18 & 4.50E 00 & -0.01 & 0.01 & 3.95E 00 & 0.02 & 5.05E 00 & 0.01 \\
17 & 4.25E 00 & -0.01 & 0.02 & 3.75E 00 & 0.02 & 4.80E 00 & 0.01 \\
16 & 4.00E 00 & -0.01 & 0.03 & 3.45E 00 & 0.01 & 4.55E 00 & 0.01 \\
15 & 3.75E 00 & -0.01 & 0.03 & 3.25E 00 & 0.00 & 4.30E 00 & 0.01 \\
14 & 3.50E 00 & -0.01 & 0.03 & 2.95E 00 & 0.01 & 4.05E 00 & 0.01 \\
13 & 3.25E 00 & -0.01 & 0.02 & 2.75E 00 & 0.00 & 3.80E 00 & 0.01 \\
12 & 3.00E 00 & -0.01 & 0.02 & 2.45E 00 & 0.00 & 3.55E 00 & 0.01 \\
11 & 2.75E 00 & -0.01 & 0.02 & 2.20E 00 & 0.00 & 3.30E 00 & 0.01 \\
10 & 2.50E 00 & -0.01 & 0.02 & 1.95E 00 & 0.00 & 3.05E 00 & 0.02 \\
9 & 2.25E 00 & -0.01 & 0.03 & 1.75E 00 & 0.00 & 2.80E 00 & 0.02 \\
8 & 2.00E 00 & -0.02 & 0.02 & 1.55E 00 & 0.00 & 2.55E 00 & 0.03 \\
7 & 1.75E 00 & -0.02 & 0.02 & 1.20E 00 & 0.00 & 2.30E 00 & 0.03 \\
6 & 1.50E 00 & -0.04 & 0.01 & 4.94E-01 & 0.01 & 2.05E 00 & 0.03 \\
5 & 1.25E 00 & -0.12 & 0.02 & 7.94E-01 & -0.20 & 1.80E 00 & 0.04 \\
4 & 1.00E-01 & -0.18 & 0.03 & 4.94E-01 & -0.45 & 1.55E 00 & 0.04 \\
3 & 7.50E-01 & -0.14 & 0.00 & 1.99E-01 & -0.48 & 1.30E 00 & 0.04 \\
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 & 1.00 & 1.00 & -5.51E-01 & 0.14 & 5.51E-01 & 0.14 \\
\end{array}
\]
## Spectral Data

**Tullahgma 32 Percent Merycury**

*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**

**Model**  
**Freq. = 8.59**  
**Prototype Freq. = 2.45**  
**Reduced Freq. = 1.00**

### Table

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Prototype</th>
<th>Reduced</th>
<th>Phase Angle</th>
<th>Config.</th>
<th>Mach.</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>-0.56</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>-0.51</td>
<td>0.51</td>
<td>0.51</td>
<td>0.51</td>
</tr>
<tr>
<td>7.0</td>
<td>7.0</td>
<td>7.0</td>
<td>-0.51</td>
<td>0.51</td>
<td>0.51</td>
<td>0.51</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

**Summary**

- **MCDEL FR** = 8.59
- **S.F.** = 0.00
- **CONFR.** = 0.00
- **COHER.** = 0.00
### TULLAHOMA 32 PERCENT MERCURY
### FLUCTUATING PRESSURE TEST

**α = 0°, β = 0°**

<table>
<thead>
<tr>
<th>CONFIG. MA-1</th>
<th>MACH NO.</th>
<th>TAPE NO.</th>
<th>PAPI NO.</th>
<th>J</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJJO= 4.2977 E-01</td>
<td>RJJO= 4.5449 E-02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### CORRELATION DATA

<table>
<thead>
<tr>
<th>L</th>
<th>TAU (MSEC)</th>
<th>NRJ (TAU)</th>
<th>NRJI (TAU)</th>
<th>TAU (MSEC)</th>
<th>NRJ (TAU)</th>
<th>NRJI (TAU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7C</td>
<td>1.75E C1</td>
<td>0.02</td>
<td>0.02</td>
<td>1.7CE C1</td>
<td>-0.03</td>
<td>1.80E C1</td>
</tr>
<tr>
<td>69</td>
<td>1.77E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.67E 01</td>
<td>-0.02</td>
<td>1.70E 01</td>
</tr>
<tr>
<td>68</td>
<td>1.76E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.66E 01</td>
<td>0.00</td>
<td>1.70E 01</td>
</tr>
<tr>
<td>67</td>
<td>1.67E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.60E 01</td>
<td>0.01</td>
<td>1.68E 01</td>
</tr>
<tr>
<td>66</td>
<td>1.66E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.55E 01</td>
<td>-0.01</td>
<td>1.65E 01</td>
</tr>
<tr>
<td>65</td>
<td>1.57E 01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>1.52E 01</td>
<td>0.01</td>
<td>1.63E 01</td>
</tr>
<tr>
<td>64</td>
<td>1.55E 01</td>
<td>-0.02</td>
<td>-0.02</td>
<td>1.35E 01</td>
<td>-0.01</td>
<td>1.40E 01</td>
</tr>
<tr>
<td>63</td>
<td>1.52E 01</td>
<td>-0.02</td>
<td>-0.02</td>
<td>1.05E 01</td>
<td>-0.01</td>
<td>1.15E 01</td>
</tr>
<tr>
<td>62</td>
<td>1.41E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>1.44E 01</td>
<td>-0.01</td>
<td>1.54E 01</td>
</tr>
<tr>
<td>61</td>
<td>1.44E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>1.44E 01</td>
<td>-0.01</td>
<td>1.54E 01</td>
</tr>
<tr>
<td>60</td>
<td>1.37E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>1.37E 01</td>
<td>-0.01</td>
<td>1.47E 01</td>
</tr>
<tr>
<td>59</td>
<td>1.17E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>1.17E 01</td>
<td>-0.01</td>
<td>1.27E 01</td>
</tr>
<tr>
<td>58</td>
<td>1.07E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>1.07E 01</td>
<td>-0.01</td>
<td>1.17E 01</td>
</tr>
<tr>
<td>57</td>
<td>0.97E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.97E 01</td>
<td>-0.01</td>
<td>1.07E 01</td>
</tr>
<tr>
<td>56</td>
<td>0.87E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.87E 01</td>
<td>-0.01</td>
<td>0.97E 01</td>
</tr>
<tr>
<td>55</td>
<td>0.77E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.77E 01</td>
<td>-0.01</td>
<td>0.87E 01</td>
</tr>
<tr>
<td>54</td>
<td>0.67E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.67E 01</td>
<td>-0.01</td>
<td>0.77E 01</td>
</tr>
<tr>
<td>53</td>
<td>0.57E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.57E 01</td>
<td>-0.01</td>
<td>0.67E 01</td>
</tr>
<tr>
<td>52</td>
<td>0.47E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.47E 01</td>
<td>-0.01</td>
<td>0.57E 01</td>
</tr>
<tr>
<td>51</td>
<td>0.37E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.37E 01</td>
<td>-0.01</td>
<td>0.47E 01</td>
</tr>
<tr>
<td>50</td>
<td>0.27E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.27E 01</td>
<td>-0.01</td>
<td>0.37E 01</td>
</tr>
<tr>
<td>49</td>
<td>0.17E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.17E 01</td>
<td>-0.01</td>
<td>0.27E 01</td>
</tr>
<tr>
<td>48</td>
<td>0.07E 01</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.07E 01</td>
<td>-0.01</td>
<td>0.17E 01</td>
</tr>
</tbody>
</table>
**TULLAHGMA 32 PERCENT MERCURY**

**FLUCTUATING PRESSURE TEST**

<table>
<thead>
<tr>
<th>τ (MS)</th>
<th>ρ</th>
<th>τ (C)</th>
<th>ρ</th>
<th>τ (MS)</th>
<th>ρ</th>
<th>τ (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>8.25E CC</td>
<td>0.01</td>
<td>C.01</td>
<td>7.71E CC</td>
<td>0.00</td>
<td>8.79E CO</td>
</tr>
<tr>
<td>31</td>
<td>7.75E CC</td>
<td>0.01</td>
<td>C.01</td>
<td>7.46E CO</td>
<td>0.01</td>
<td>8.29E CO</td>
</tr>
<tr>
<td>30</td>
<td>7.75E CC</td>
<td>0.01</td>
<td>C.01</td>
<td>6.96E CO</td>
<td>0.00</td>
<td>7.96E CO</td>
</tr>
<tr>
<td>29</td>
<td>6.75E CC</td>
<td>-0.01</td>
<td>C.01</td>
<td>6.46E CO</td>
<td>0.02</td>
<td>7.54E CO</td>
</tr>
<tr>
<td>28</td>
<td>6.75E CC</td>
<td>-0.01</td>
<td>C.01</td>
<td>5.46E CO</td>
<td>0.00</td>
<td>6.29E CO</td>
</tr>
<tr>
<td>27</td>
<td>7.75E CC</td>
<td>0.01</td>
<td>C.01</td>
<td>5.46E CO</td>
<td>0.00</td>
<td>7.04E CO</td>
</tr>
<tr>
<td>26</td>
<td>6.75E CC</td>
<td>0.02</td>
<td>C.01</td>
<td>5.71E CO</td>
<td>0.01</td>
<td>6.79E CO</td>
</tr>
<tr>
<td>25</td>
<td>6.25E CC</td>
<td>0.02</td>
<td>C.01</td>
<td>5.46E CO</td>
<td>0.00</td>
<td>6.54E CO</td>
</tr>
<tr>
<td>24</td>
<td>6.25E CC</td>
<td>0.02</td>
<td>C.01</td>
<td>5.21E CO</td>
<td>0.00</td>
<td>6.29E CO</td>
</tr>
<tr>
<td>23</td>
<td>5.75E CC</td>
<td>0.02</td>
<td>C.01</td>
<td>4.96E CO</td>
<td>0.00</td>
<td>6.04E CO</td>
</tr>
<tr>
<td>22</td>
<td>5.75E CC</td>
<td>0.02</td>
<td>C.01</td>
<td>4.71E CO</td>
<td>0.00</td>
<td>5.79E CO</td>
</tr>
<tr>
<td>21</td>
<td>5.75E CC</td>
<td>0.02</td>
<td>C.01</td>
<td>4.46E CO</td>
<td>0.00</td>
<td>5.54E CO</td>
</tr>
<tr>
<td>20</td>
<td>5.75E CC</td>
<td>0.02</td>
<td>C.01</td>
<td>4.21E CO</td>
<td>0.00</td>
<td>5.29E CO</td>
</tr>
<tr>
<td>19</td>
<td>4.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>3.96E CO</td>
<td>0.00</td>
<td>5.04E CO</td>
</tr>
<tr>
<td>18</td>
<td>4.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>3.71E CO</td>
<td>0.00</td>
<td>4.79E CO</td>
</tr>
<tr>
<td>17</td>
<td>4.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>3.46E CO</td>
<td>0.00</td>
<td>4.54E CO</td>
</tr>
<tr>
<td>16</td>
<td>4.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>3.21E CO</td>
<td>0.00</td>
<td>4.29E CO</td>
</tr>
<tr>
<td>15</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>2.96E CO</td>
<td>0.00</td>
<td>4.04E CO</td>
</tr>
<tr>
<td>14</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>2.71E CO</td>
<td>0.00</td>
<td>3.79E CO</td>
</tr>
<tr>
<td>13</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>2.46E CO</td>
<td>0.00</td>
<td>3.54E CO</td>
</tr>
<tr>
<td>12</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>2.21E CO</td>
<td>0.00</td>
<td>3.29E CO</td>
</tr>
<tr>
<td>11</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>1.96E CO</td>
<td>0.00</td>
<td>3.04E CO</td>
</tr>
<tr>
<td>10</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>1.71E CO</td>
<td>0.00</td>
<td>2.79E CO</td>
</tr>
<tr>
<td>9</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>1.46E CO</td>
<td>0.00</td>
<td>2.54E CO</td>
</tr>
<tr>
<td>8</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>1.21E CO</td>
<td>0.00</td>
<td>2.29E CO</td>
</tr>
<tr>
<td>7</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.96E CO</td>
<td>0.00</td>
<td>2.04E CO</td>
</tr>
<tr>
<td>6</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.71E CO</td>
<td>0.00</td>
<td>1.79E CO</td>
</tr>
<tr>
<td>5</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.46E CO</td>
<td>0.00</td>
<td>1.54E CO</td>
</tr>
<tr>
<td>4</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.21E CO</td>
<td>0.00</td>
<td>1.29E CO</td>
</tr>
<tr>
<td>3</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.06E CO</td>
<td>0.00</td>
<td>0.00E CO</td>
</tr>
<tr>
<td>2</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.00E CO</td>
<td>0.00</td>
<td>0.00E CO</td>
</tr>
<tr>
<td>1</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.00E CO</td>
<td>0.00</td>
<td>0.00E CO</td>
</tr>
<tr>
<td>0</td>
<td>3.75E CC</td>
<td>0.00</td>
<td>C.01</td>
<td>0.00E CO</td>
<td>0.00</td>
<td>0.00E CO</td>
</tr>
</tbody>
</table>
**SPECTRAL DATA**

**TULLAHOMA 32 PERCENT MERCURY**

**FLUCTUATING PRESSURE TEST**

\[ \alpha = 0^\circ, \beta = 0^\circ \]

**CONFIG. MA-1**

**WAVE NO. = 1.7**

**TAPE NO. = 9.0**

**PART NO. = 13.3**

**J = 6**

**I = 9**

**MODEL**

**FREQ. + S.F. = 4.5**

**Prototype Freq. S.F. = 2.45**

**Reduced Freq. S.F. = 1.00**

<table>
<thead>
<tr>
<th>Model</th>
<th>Prototype Reduced S.F. XSSI(F)</th>
<th>prototype Reduced s.f. xsij(F)</th>
<th>ACIJ(F)</th>
<th>NCII(F)</th>
<th>NCII(F)</th>
<th>Mod. of Phase of Freq.</th>
<th>Freq.</th>
<th>Coher.</th>
<th>Coher.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
</tr>
<tr>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
</tr>
<tr>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
</tr>
<tr>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
<td>1.45</td>
</tr>
<tr>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
</tr>
<tr>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
</tr>
</tbody>
</table>
# Tullahoma 32 Percent Mercury Fluctuating Pressure Test

**α = 90°, B = 0°**

<table>
<thead>
<tr>
<th>CONFIG. MA-L</th>
<th>RJJ(0)</th>
<th>NR1(1)</th>
<th>TAU(C)</th>
<th>NR1(1)</th>
<th>TAU(C)</th>
<th>NR1(1)</th>
<th>TAU(C)</th>
<th>NR1(1)</th>
<th>TAU(C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJJ(0)</td>
<td>1.4957E-01</td>
<td>2.3423E-03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**L TAU(MSEC) NRJJ(TAU) NR11(TAU) +TAU,C(MSEC) NR11(TAU,C) -TAU,C(MSEC) NR11(-TAU,C)***

<table>
<thead>
<tr>
<th>L TAU(MSEC)</th>
<th>NRJJ(TAU)</th>
<th>NR11(TAU)</th>
<th>TAU,C(MSEC) NR11(TAU,C)</th>
<th>TAU,C(MSEC) NR11(-TAU,C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>69 1.773E-01</td>
<td>0.02</td>
<td>0.03</td>
<td>1.67E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>68 1.773E-01</td>
<td>0.03</td>
<td>0.01</td>
<td>1.76E-01</td>
<td>-0.02</td>
</tr>
<tr>
<td>67 1.673E-01</td>
<td>0.02</td>
<td>0.01</td>
<td>1.57E-01</td>
<td>-0.02</td>
</tr>
<tr>
<td>66 1.673E-01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.66E-01</td>
<td>-0.00</td>
</tr>
<tr>
<td>65 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>64 1.573E-01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.56E-01</td>
<td>-0.00</td>
</tr>
<tr>
<td>63 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>62 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>61 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>60 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>59 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>58 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>57 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>56 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>55 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>54 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>53 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>52 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>51 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>50 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>49 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>48 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>47 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>46 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>45 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>44 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>43 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>42 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>41 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>40 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>39 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>38 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>37 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>36 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>35 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>34 1.573E-01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E-01</td>
<td>-0.01</td>
</tr>
</tbody>
</table>
### Correlation Data

**Tullahoma 32 Percent Mercury Fluctuating Pressure Test**

α = 0°, β = 0°

**Config. MA-1**  
Wach No. = 1.5  
TAPF No. = 6.0  
Part No. = 16.3  
J = 6  
I = 7

<table>
<thead>
<tr>
<th>Tau (msec)</th>
<th>NRII(Tau)</th>
<th>NRII(Tau) + Tau, C (msec)</th>
<th>NRII(Tau) - Tau, C (msec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 8.25E CC</td>
<td>-0.01</td>
<td>0.04</td>
<td>7.70E CC</td>
</tr>
<tr>
<td>31 7.75E CC</td>
<td>-0.01</td>
<td>0.03</td>
<td>7.20E CC</td>
</tr>
<tr>
<td>30 7.50E CC</td>
<td>-0.02</td>
<td>0.03</td>
<td>6.95E 00</td>
</tr>
<tr>
<td>29 7.25E CC</td>
<td>-0.01</td>
<td>0.03</td>
<td>6.70E 00</td>
</tr>
<tr>
<td>28 7.00E CC</td>
<td>0.01</td>
<td>0.03</td>
<td>6.45E 00</td>
</tr>
<tr>
<td>27 6.75E CC</td>
<td>0.01</td>
<td>0.04</td>
<td>6.20E 00</td>
</tr>
<tr>
<td>26 6.50E CC</td>
<td>0.02</td>
<td>0.04</td>
<td>5.95E 00</td>
</tr>
<tr>
<td>25 6.25E CC</td>
<td>0.03</td>
<td>0.04</td>
<td>5.70E 00</td>
</tr>
<tr>
<td>24 6.00E CC</td>
<td>0.03</td>
<td>0.04</td>
<td>5.45E 00</td>
</tr>
<tr>
<td>23 5.75E CC</td>
<td>0.03</td>
<td>0.04</td>
<td>5.20E 00</td>
</tr>
<tr>
<td>22 5.50E CC</td>
<td>0.02</td>
<td>0.06</td>
<td>4.95E 00</td>
</tr>
<tr>
<td>21 5.25E CC</td>
<td>0.00</td>
<td>0.06</td>
<td>4.70E 00</td>
</tr>
<tr>
<td>20 5.00E CC</td>
<td>0.01</td>
<td>0.04</td>
<td>4.45E 00</td>
</tr>
<tr>
<td>19 4.75E CC</td>
<td>0.01</td>
<td>0.03</td>
<td>4.20E 00</td>
</tr>
<tr>
<td>18 4.50E CC</td>
<td>0.00</td>
<td>0.04</td>
<td>3.95E 00</td>
</tr>
<tr>
<td>17 4.25E CC</td>
<td>0.01</td>
<td>0.05</td>
<td>3.70E 00</td>
</tr>
<tr>
<td>16 4.00E CC</td>
<td>0.01</td>
<td>0.07</td>
<td>3.45E 00</td>
</tr>
<tr>
<td>15 3.75E CC</td>
<td>0.01</td>
<td>0.08</td>
<td>3.20E 00</td>
</tr>
<tr>
<td>14 3.50E CC</td>
<td>0.00</td>
<td>0.06</td>
<td>2.95E 00</td>
</tr>
<tr>
<td>13 3.25E CC</td>
<td>0.02</td>
<td>0.04</td>
<td>2.70E 00</td>
</tr>
<tr>
<td>12 3.00E CC</td>
<td>0.03</td>
<td>0.02</td>
<td>2.45E 00</td>
</tr>
<tr>
<td>11 2.75E CC</td>
<td>0.02</td>
<td>0.03</td>
<td>2.20E 00</td>
</tr>
<tr>
<td>10 2.50E CC</td>
<td>0.01</td>
<td>0.05</td>
<td>1.95E 00</td>
</tr>
<tr>
<td>9 2.25E CC</td>
<td>0.01</td>
<td>0.07</td>
<td>1.70E 00</td>
</tr>
<tr>
<td>8 2.00E CC</td>
<td>0.02</td>
<td>0.06</td>
<td>1.55E 00</td>
</tr>
<tr>
<td>7 1.75E CC</td>
<td>0.06</td>
<td>0.08</td>
<td>1.30E 00</td>
</tr>
<tr>
<td>6 1.50E CC</td>
<td>0.06</td>
<td>0.12</td>
<td>9.40E-01</td>
</tr>
<tr>
<td>5 1.25E CC</td>
<td>0.06</td>
<td>0.11</td>
<td>6.90E-01</td>
</tr>
<tr>
<td>4 1.00E CC</td>
<td>0.07</td>
<td>0.07</td>
<td>4.49E-01</td>
</tr>
<tr>
<td>3 7.50E-01</td>
<td>0.10</td>
<td>0.03</td>
<td>1.99E-01</td>
</tr>
<tr>
<td>2 5.00E-01</td>
<td>0.04</td>
<td>0.10</td>
<td>5.10E-02</td>
</tr>
<tr>
<td>1 2.50E-01</td>
<td>0.56</td>
<td>0.60</td>
<td>3.01E-01</td>
</tr>
<tr>
<td>0 3.</td>
<td>1.00</td>
<td>1.00</td>
<td>5.51E-01</td>
</tr>
</tbody>
</table>
SPECTRAL DATA

TULLAHUMA 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 PROTOTYPE REDUCED S.F.xS(J/E) S.F.xS(J/E) NCJ/J(E) NCJ/J(E) MOD. OF PHASE OF

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
FREQ. & FREQ. & FREQ. & FREQ. & FREQ. & FREQ. & FREQ. \\
\hline
0 & 0 & 2.93E-03 & 1.35E-04 & 0 & 0.48 & 180.00 \\
28.57 & 9.06 & 0.10 & 5.08E-03 & 1.65E-04 & 0.02 & 177.81 \\
57.14 & 18.12 & 0.20 & 4.15E-03 & 1.34E-04 & 0.26 & 0.04 & 37.07 \\
85.71 & 27.18 & 0.30 & 3.84E-03 & 8.34E-05 & 0.45 & 0.06 & 0.31 \\
114.29 & 36.24 & 0.40 & 3.79E-03 & 8.75E-05 & 0.31 & 0.04 & 0.37 \\
142.86 & 45.30 & 0.50 & 4.16E-03 & 8.31E-05 & 0.36 & 0.01 & 0.32 \\
171.43 & 54.36 & 0.60 & 4.07E-03 & 7.42E-05 & 0.40 & 0.07 & 0.35 \\
200.00 & 63.42 & 0.70 & 3.63E-03 & 7.97E-05 & 0.34 & 0.10 & 0.35 \\
228.57 & 72.48 & 0.80 & 3.41E-03 & 7.50E-05 & 0.40 & 0.13 & 0.42 \\
257.14 & 81.54 & 0.90 & 3.18E-03 & 6.62E-05 & 0.41 & 0.22 & 0.46 \\
285.71 & 90.60 & 1.00 & 4.46E-03 & 6.22E-05 & 0.38 & 0.25 & 0.45 \\
314.29 & 99.66 & 1.10 & 4.75E-03 & 6.35E-05 & 0.46 & 0.29 & 0.46 \\
342.86 & 108.72 & 1.20 & 4.77E-03 & 6.21E-05 & 0.47 & 0.30 & 0.47 \\
371.43 & 117.74 & 1.30 & 4.75E-03 & 5.62E-05 & 0.47 & 0.30 & 0.47 \\
400.00 & 126.84 & 1.40 & 4.83E-03 & 5.42E-05 & 0.34 & 0.31 & 0.46 \\
428.57 & 135.96 & 1.50 & 4.87E-03 & 6.00E-05 & 0.44 & 0.30 & 0.53 \\
457.14 & 144.96 & 1.60 & 5.02E-03 & 6.69E-05 & 0.48 & 0.26 & 0.54 \\
485.71 & 154.02 & 1.70 & 5.54E-03 & 7.29E-05 & 0.47 & 0.25 & 0.53 \\
514.29 & 163.08 & 1.80 & 5.88E-03 & 7.46E-05 & 0.46 & 0.24 & 0.54 \\
542.86 & 172.14 & 1.90 & 5.76E-03 & 7.45E-05 & 0.45 & 0.31 & 0.55 \\
571.43 & 181.20 & 2.00 & 4.41E-03 & 7.42E-05 & 0.43 & 0.35 & 0.55 \\
600.00 & 190.26 & 2.10 & 5.33E-03 & 6.94E-05 & 0.43 & 0.36 & 0.56 \\
628.57 & 199.32 & 2.20 & 5.42E-03 & 5.71E-05 & 0.42 & 0.37 & 0.56 \\
657.14 & 208.38 & 2.30 & 5.55E-03 & 5.55E-05 & 0.40 & 0.40 & 0.56 \\
685.71 & 217.44 & 2.40 & 5.29E-03 & 5.01E-05 & 0.39 & 0.41 & 0.57 \\
714.29 & 226.50 & 2.50 & 4.76E-03 & 5.83E-05 & 0.35 & 0.40 & 0.53 \\
742.86 & 235.56 & 2.60 & 4.49E-03 & 5.37E-05 & 0.29 & 0.30 & 0.49 \\
771.43 & 244.62 & 2.70 & 4.10E-03 & 5.13E-05 & 0.29 & 0.42 & 0.50 \\
800.00 & 253.68 & 2.80 & 3.61E-03 & 5.11E-05 & 0.32 & 0.44 & 0.54 \\
828.57 & 262.74 & 2.90 & 3.25E-03 & 4.93E-05 & 0.32 & 0.44 & 0.54 \\
857.14 & 271.80 & 3.00 & 2.84E-03 & 4.24E-05 & 0.29 & 0.42 & 0.50 \\
885.71 & 280.86 & 3.10 & 2.40E-03 & 4.19E-05 & 0.26 & 0.41 & 0.48 \\
914.29 & 289.92 & 3.20 & 2.77E-03 & 4.03E-05 & 0.22 & 0.44 & 0.50 \\
942.86 & 298.98 & 3.30 & 2.55E-03 & 3.32E-05 & 0.21 & 0.45 & 0.50 \\
971.43 & 308.04 & 3.40 & 2.27E-03 & 2.84E-05 & 0.20 & 0.41 & 0.46 \\
1000.00 & 317.10 & 3.50 & 2.14E-03 & 2.82E-05 & 0.16 & 0.44 & 0.46 \\
\hline
\end{tabular}
## Correlation Data

**Tullahoma 32 Percent Mercury Fluctuating Pressure Test**

### Model

\[ \alpha = 0^\circ, \beta = 0^\circ \]

**Mach No.** = 1.5  **Tape No.** = 6.0  **Part No.** = 16.3  **J** = 6  **I** = 9

**Config. MA-1**  
**PJJ(R) = 1.5056F-01**  
**RIII(:, ) = 3.8722E-03**

<table>
<thead>
<tr>
<th>TAU (MSEC)</th>
<th>NRIJ (TAU)</th>
<th>NRII (TAU)</th>
<th>TAUX (C, MSEC)</th>
<th>ARIJ (TAU, C)</th>
<th>ARIJ (TAU, C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>1.75E C1</td>
<td>0.01</td>
<td>-0.00</td>
<td>1.76E 01</td>
<td>0.02</td>
</tr>
<tr>
<td>65</td>
<td>1.72E C1</td>
<td>0.02</td>
<td>0.00</td>
<td>1.67E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>68</td>
<td>1.77E C1</td>
<td>0.02</td>
<td>0.00</td>
<td>1.65E 01</td>
<td>-0.00</td>
</tr>
<tr>
<td>67</td>
<td>1.67E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.62E 01</td>
<td>0.00</td>
</tr>
<tr>
<td>66</td>
<td>1.65E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.60E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>65</td>
<td>1.62E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.57E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>64</td>
<td>1.60E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.55E 01</td>
<td>-0.01</td>
</tr>
<tr>
<td>63</td>
<td>1.57E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.52E 01</td>
<td>0.02</td>
</tr>
<tr>
<td>62</td>
<td>1.55E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.50E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>61</td>
<td>1.53E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.47E 01</td>
<td>0.00</td>
</tr>
<tr>
<td>60</td>
<td>1.50E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.45E 01</td>
<td>0.00</td>
</tr>
<tr>
<td>59</td>
<td>1.47E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.42E 01</td>
<td>0.00</td>
</tr>
<tr>
<td>58</td>
<td>1.45E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.40E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>57</td>
<td>1.43E 01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.37E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>56</td>
<td>1.40E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.33E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>55</td>
<td>1.37E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.30E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>54</td>
<td>1.35E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.30E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>53</td>
<td>1.32E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.27E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>52</td>
<td>1.30E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.25E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>51</td>
<td>1.27E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.22E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>50</td>
<td>1.25E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.20E 01</td>
<td>0.02</td>
</tr>
<tr>
<td>49</td>
<td>1.23E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.17E 01</td>
<td>0.02</td>
</tr>
<tr>
<td>48</td>
<td>1.20E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>1.15E 01</td>
<td>0.02</td>
</tr>
<tr>
<td>47</td>
<td>1.17E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>1.12E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>46</td>
<td>1.15E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>1.10E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>45</td>
<td>1.12E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>1.07E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>44</td>
<td>1.10E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>1.06E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>43</td>
<td>1.07E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>1.02E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>42</td>
<td>1.05E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>9.96E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>41</td>
<td>1.02E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>9.71E 00</td>
<td>0.02</td>
</tr>
<tr>
<td>40</td>
<td>0.99E 01</td>
<td>0.03</td>
<td>0.00</td>
<td>9.46E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>39</td>
<td>0.97E 00</td>
<td>0.03</td>
<td>0.00</td>
<td>9.21E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>38</td>
<td>0.95E 00</td>
<td>0.03</td>
<td>0.00</td>
<td>9.21E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>37</td>
<td>0.92E 00</td>
<td>0.03</td>
<td>0.00</td>
<td>9.21E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>36</td>
<td>0.90E 00</td>
<td>0.03</td>
<td>0.00</td>
<td>9.21E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>35</td>
<td>0.87E 00</td>
<td>0.03</td>
<td>0.00</td>
<td>9.21E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>34</td>
<td>0.85E 00</td>
<td>0.03</td>
<td>0.00</td>
<td>9.21E 00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
### CORRELATION DATA

#### TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

<table>
<thead>
<tr>
<th>L TAU(MSEC)</th>
<th>NRJ(J(TAU)</th>
<th>NRI(J(TAU)</th>
<th>TAU(C(MSEC))</th>
<th>NRI(J(TAU,C)</th>
<th>TAU,C(MSEC)</th>
<th>NRI(J(-TAU,C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 8.25E CC</td>
<td>0.01</td>
<td>0.02</td>
<td>7.71E 00</td>
<td>0.00</td>
<td>8.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>32 8.05E CC</td>
<td>-0.01</td>
<td>0.02</td>
<td>7.46E 00</td>
<td>0.00</td>
<td>8.54E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>31 7.75E CC</td>
<td>-0.01</td>
<td>0.03</td>
<td>7.21E 00</td>
<td>0.00</td>
<td>8.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>30 7.5E CC</td>
<td>-0.00</td>
<td>0.04</td>
<td>6.46E 00</td>
<td>0.01</td>
<td>8.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>29 7.25E CC</td>
<td>-0.00</td>
<td>0.04</td>
<td>6.71E 00</td>
<td>0.01</td>
<td>7.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>28 7.07E CC</td>
<td>-0.00</td>
<td>0.04</td>
<td>6.46E 00</td>
<td>0.01</td>
<td>7.45E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>27 6.77E CC</td>
<td>0.02</td>
<td>0.04</td>
<td>6.21E 00</td>
<td>0.01</td>
<td>7.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>26 6.55E CC</td>
<td>0.02</td>
<td>0.05</td>
<td>5.96E 00</td>
<td>0.01</td>
<td>7.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>25 6.25E CC</td>
<td>0.03</td>
<td>0.05</td>
<td>5.71E 00</td>
<td>0.00</td>
<td>6.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>24 6.05E CC</td>
<td>0.03</td>
<td>0.05</td>
<td>5.46E 00</td>
<td>0.00</td>
<td>6.54E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>23 5.75E CC</td>
<td>0.02</td>
<td>0.06</td>
<td>5.21E 00</td>
<td>0.01</td>
<td>6.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>22 5.55E CC</td>
<td>0.01</td>
<td>0.04</td>
<td>4.96E 00</td>
<td>0.02</td>
<td>6.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>21 5.35E CC</td>
<td>0.01</td>
<td>0.05</td>
<td>4.71E 00</td>
<td>0.02</td>
<td>5.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>20 5.15E CC</td>
<td>0.01</td>
<td>0.07</td>
<td>4.46E 00</td>
<td>0.02</td>
<td>5.54E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>19 4.95E CC</td>
<td>0.01</td>
<td>0.07</td>
<td>4.21E 00</td>
<td>0.02</td>
<td>5.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>18 4.75E CC</td>
<td>0.01</td>
<td>0.07</td>
<td>3.96E 00</td>
<td>0.02</td>
<td>5.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>17 4.55E CC</td>
<td>0.01</td>
<td>0.08</td>
<td>3.71E 00</td>
<td>0.02</td>
<td>4.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>16 4.35E CC</td>
<td>0.01</td>
<td>0.09</td>
<td>3.46E 00</td>
<td>0.02</td>
<td>4.54E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>15 4.15E CC</td>
<td>0.01</td>
<td>0.10</td>
<td>3.21E 00</td>
<td>0.02</td>
<td>4.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>14 3.95E CC</td>
<td>0.02</td>
<td>0.11</td>
<td>2.96E 00</td>
<td>0.01</td>
<td>4.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>13 3.75E CC</td>
<td>0.02</td>
<td>0.12</td>
<td>2.71E 00</td>
<td>0.00</td>
<td>3.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>12 3.55E CC</td>
<td>0.02</td>
<td>0.14</td>
<td>2.46E 00</td>
<td>0.01</td>
<td>3.54E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>11 3.35E CC</td>
<td>0.02</td>
<td>0.14</td>
<td>2.21E 00</td>
<td>0.00</td>
<td>3.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>10 3.15E CC</td>
<td>0.01</td>
<td>0.14</td>
<td>1.96E 00</td>
<td>0.01</td>
<td>3.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>9 2.95E CC</td>
<td>0.01</td>
<td>0.16</td>
<td>1.71E 00</td>
<td>0.05</td>
<td>2.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>8 2.75E CC</td>
<td>0.02</td>
<td>0.16</td>
<td>1.46E 00</td>
<td>0.06</td>
<td>2.54E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>7 2.55E CC</td>
<td>0.04</td>
<td>0.18</td>
<td>1.21E 00</td>
<td>0.06</td>
<td>2.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>6 2.35E CC</td>
<td>0.04</td>
<td>0.22</td>
<td>0.96E 00</td>
<td>0.25</td>
<td>2.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>5 2.15E CC</td>
<td>0.01</td>
<td>0.14</td>
<td>0.71E 00</td>
<td>0.20</td>
<td>1.79E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>4 1.95E CC</td>
<td>0.01</td>
<td>0.21</td>
<td>0.46E 00</td>
<td>0.01</td>
<td>1.54E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>3 1.75E CC</td>
<td>0.18</td>
<td>0.20</td>
<td>0.21E 00</td>
<td>0.04</td>
<td>1.29E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>2 1.50E CC</td>
<td>-0.06</td>
<td>0.11</td>
<td>-4.10E-02</td>
<td>-0.06</td>
<td>1.04E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>1 1.25E-01</td>
<td>0.56</td>
<td>0.54</td>
<td>-2.91E-01</td>
<td>0.01</td>
<td>7.91E-01</td>
<td>0.02</td>
</tr>
<tr>
<td>0 0.00</td>
<td>1.00</td>
<td>1.00</td>
<td>-5.41E-01</td>
<td>0.02</td>
<td>5.41E-01</td>
<td>0.02</td>
</tr>
</tbody>
</table>
### Spectral Data

#### Tullahoma 32 Percent Mercury Fluctuating Pressure Test

**CONFIG.** MA-1  
**MACH NO.** = 1.5  
**TAPE NO.** = 0.0  
**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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
<td>0.14</td>
<td>-0.14</td>
</tr>
<tr>
<td>2.10</td>
<td>2.10</td>
<td>2.10</td>
<td>0.14</td>
<td>0.14</td>
<td>360.00</td>
</tr>
<tr>
<td>4.25</td>
<td>4.25</td>
<td>4.25</td>
<td>0.14</td>
<td>0.14</td>
<td>19.75</td>
</tr>
<tr>
<td>6.30</td>
<td>6.30</td>
<td>6.30</td>
<td>0.14</td>
<td>0.14</td>
<td>19.75</td>
</tr>
<tr>
<td>8.42</td>
<td>8.42</td>
<td>8.42</td>
<td>0.14</td>
<td>0.14</td>
<td>19.75</td>
</tr>
<tr>
<td>10.50</td>
<td>10.50</td>
<td>10.50</td>
<td>0.14</td>
<td>0.14</td>
<td>19.75</td>
</tr>
<tr>
<td>12.60</td>
<td>12.60</td>
<td>12.60</td>
<td>0.14</td>
<td>0.14</td>
<td>19.75</td>
</tr>
<tr>
<td>14.70</td>
<td>14.70</td>
<td>14.70</td>
<td>0.14</td>
<td>0.14</td>
<td>19.75</td>
</tr>
<tr>
<td>16.80</td>
<td>16.80</td>
<td>16.80</td>
<td>0.14</td>
<td>0.14</td>
<td>19.75</td>
</tr>
</tbody>
</table>

**α = 0°, β = 0°**

**REGISED.**  
**REVISED.**  
**REPORT.** B661

---

**Page Date:** 30 April 1965  
**Report:** B661  
**St. Louis, Missouri**
6. TULLAHOMA MA-2 CONFIGURATION, 32% SCALE

FLUCTUATING PRESSURE DATA

TEST INFORMATION AND DATA
REDUCTION PARAMETERS

<table>
<thead>
<tr>
<th>Wind Tunnel</th>
<th>AEDC 16' x 16' Propulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Test</td>
<td>October 1960</td>
</tr>
<tr>
<td>Model Size</td>
<td>32%</td>
</tr>
<tr>
<td>Sample Rate</td>
<td>4,000/sec.</td>
</tr>
<tr>
<td>No. of Samples</td>
<td>12,000</td>
</tr>
<tr>
<td>No. of Special Estimates</td>
<td>70</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>343</td>
</tr>
<tr>
<td>Filter Bandwidth (Prototype Frequency)</td>
<td>17.02 - 17.41 cps</td>
</tr>
<tr>
<td>Characteristic Length (Model)</td>
<td>.291 ft.</td>
</tr>
</tbody>
</table>
## INDEX OF PLOTS AND TABULATIONS
### TULLAHOMA 32% MERCURY-ATLAS
### MA-2 CONFIGURATION

<table>
<thead>
<tr>
<th>Mach No.</th>
<th>$\alpha$</th>
<th>$\beta$</th>
<th>Correl.</th>
<th>Item</th>
<th>Plot Page</th>
<th>Tabulation Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>0°</td>
<td>0°</td>
<td>7 x 6</td>
<td>Auto 7 x 7</td>
<td>70</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto 6 x 6</td>
<td>71</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cross 7 x 6</td>
<td>72</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 7 x 6</td>
<td>73</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 6 x 6</td>
<td>74</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C &amp; Q 7 x 6</td>
<td>75</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MOC 7 x 6</td>
<td>76</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 6</td>
<td>Auto 9 x 9</td>
<td>77</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 6</td>
<td>Auto 6 x 6</td>
<td>78</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 6</td>
<td>Cross 9 x 6</td>
<td>79</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 9</td>
<td>PSD 9 x 9</td>
<td>80</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 8</td>
<td>PSD 6 x 6</td>
<td>81</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 8</td>
<td>C &amp; Q 9 x 6</td>
<td>82</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 8</td>
<td>MOC 9 x 6</td>
<td>83</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 8</td>
<td>POC 9 x 6</td>
<td>84</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 9</td>
<td>Auto 9 x 9</td>
<td>85</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 9</td>
<td>Auto 8 x 8</td>
<td>86</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 8</td>
<td>Cross 9 x 8</td>
<td>87</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 8</td>
<td>PSD 9 x 9</td>
<td>88</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 x 8</td>
<td>PSD 8 x 8</td>
<td>89</td>
<td>102</td>
</tr>
<tr>
<td>Mach No.</td>
<td>α</td>
<td>β</td>
<td>Correl. I x J</td>
<td>Item</td>
<td>Plot Page</td>
<td>Tabulation Page</td>
</tr>
<tr>
<td>---------</td>
<td>---</td>
<td>---</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>----------------</td>
</tr>
<tr>
<td>1,0</td>
<td>0°</td>
<td>0°</td>
<td>9 x 8</td>
<td>C &amp; Q 9 x 8</td>
<td>81</td>
<td>102</td>
</tr>
<tr>
<td>1,2</td>
<td>0°</td>
<td>0°</td>
<td>7 x 6</td>
<td>MOC 9 x 8</td>
<td>82</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>POA 9 x 8</td>
<td>83</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto 7 x 7</td>
<td>84</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto 6 x 6</td>
<td>85</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cross 7 x 6</td>
<td>86</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 7 x 7</td>
<td>87</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 6 x 6</td>
<td>88</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C &amp; Q 7 x 6</td>
<td>89</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MOC 7 x 6</td>
<td>90</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>POA 7 x 6</td>
<td>91</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto 9 x 9</td>
<td>92</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto 6 x 6</td>
<td>93</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cross 9 x 6</td>
<td>94</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 9 x 9</td>
<td>95</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 6 x 6</td>
<td>96</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C &amp; Q 9 x 6</td>
<td>97</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MOC 9 x 6</td>
<td>98</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>POA 9 x 6</td>
<td>99</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto 11 x 11</td>
<td>90</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Auto 7 x 7</td>
<td>91</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cross 11 x 7</td>
<td>92</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 11 x 11</td>
<td>93</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSD 7 x 7</td>
<td>94</td>
<td>111</td>
</tr>
<tr>
<td>Mach No.</td>
<td>$\alpha$</td>
<td>$\beta$</td>
<td>L x J</td>
<td>Correl. Item</td>
<td>Plot Page</td>
<td>Tabulation Page</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>---------</td>
<td>-------</td>
<td>--------------</td>
<td>-----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1.2</td>
<td>0°</td>
<td>0°</td>
<td>11 x 7</td>
<td>C &amp; Q 11 x 7</td>
<td>93</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MOC 11 x 7</td>
<td></td>
<td>111</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FOC 11 x 7</td>
<td></td>
<td>111</td>
</tr>
</tbody>
</table>
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

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

\[ S.F. \times S.I. \times 10^2, \text{DIMENSIONLESS FOR REDUCED FREQ.} \]

\[ (\text{PSI})^2/\text{CPS FOR MODEL AND PROTOTYPE FREQ.} \]

\[ \text{REDUCED FREQ.} \quad \text{S.F.} = 1.0 \]

\[ \text{MODEL FREQ. (CPS)} \quad \text{S.F.} = 8.81 \]

\[ \text{PROTOTYPE FREQ. (CPS)} \quad \text{S.F.} = 7.62 \]

\[ I = 7 \]
\[ J = 6 \]
\[ \alpha = 0^\circ \]
\[ \beta = 0^\circ \]
TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST

CONFIGURATION MACH NO. = 1.0, TAPE NO. = 2.0, PART NO. = 4.3

\( I = 9 \quad J = 6 \quad \alpha = 0^\circ \quad \beta = 0^\circ \)

NORMALIZED CROSS CORRELATION NATE (TAU, c)
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 NO. AND QUAD. SPECTRUM (F) AND REFL (P)

REDUCED FREQ. S.F. = 1.00

MODEL FREQ. (CPS) S.F. = 8.81

PROTOYPE FREQ. (CPS) S.F. = 7.62

DATE
30 April 1965

ST. LOUIS, MISSOURI

77

MODEL REPORT B6G.
TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST

CONFIGURATION MACH NO. = 1.0, TAPE NO. = 2.0, PART NO. = 4.3

I = 9  
J = 8  
α = 0°  
β = 0°

NORMALIZED CROSS CORRELATION NLL (TAU, C)

(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 = 8
α = 0°
β = 0°

MODIFIED CO. AND QUAD. SPECTRA (F) AND SPECTRA (G)

NORMALIZED CO. AND QUAD. SPECTRA (H) AND SPECTRA (I)

REDUCED FREQ.  S.F. = 1.00

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

0  116.3  236.7  355.0  473.4  591.7  710.1  828.4  946.7  1065.1  1163.4  1301.6
TULLAHOMA 32 PERCENT FLUCTUATING PRESSURE TEST

CONFIGURATION MA-2, MACH NO. = 1.2, TAPE NO. = 2.9, PART NO. = 5.3

I = 7
J = 6
\alpha = 0^\circ
\beta = 0^\circ

NORMALIZED CROSS CORRELATION (\tau_\nu, c)
TULLAHONA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST
CONFIGURATION MA-2, MACH NO. = 1.2, TAPE NO. = 2.0, PART NO. = 5.3

\[ S.F. \times \text{SI}(f) \times 10^3 \times \text{CPS FOR MODEL AND PROTOTYPE FREQ.} \]

\[ (PSI)^2/\text{CPS FOR MODEL AND PROTOTYPE FREQ.} \]

\[ S.F. = 1.00 \]

\[ \frac{I = 7}{J = 6} \]

\[ \alpha = 0^\circ \]

\[ \beta = 0^\circ \]

MODEL FREQ. (CPS) S.F. = 25.2

\[ 0 \quad 137.0 \quad 274.0 \quad 411.0 \quad 547.9 \quad 664.9 \quad 821.9 \quad 958.9 \quad 1095.9 \quad 1232.9 \quad 1369.9 \quad 1506.8 \]

Prototype Freq. (CPS) S.F. = 6.71

\[ 0 \quad 41.7 \quad 63.5 \quad 125.2 \quad 166.9 \quad 206.6 \quad 250.4 \quad 292.1 \quad 333.6 \quad 375.5 \quad 417.3 \quad 459.0 \]
TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

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

$S.F. \times 10^2 / \text{PSI}^2$ FOR REDUCED FREQ.

$S.F. = 1.00$

$\text{MODEL FREQ. (CPS)}$ $S.F. = 25.2$

$\text{PROTOTYPE FREQ. (CPS)}$ $S.F. = 6.71$

$I = 9$
$J = 6$
$\alpha = 0^\circ$
$\beta = 0^\circ$
<table>
<thead>
<tr>
<th>CONFIG. MA-2</th>
<th>MACH NO. = 1.0</th>
<th>TAPE NO. = 2</th>
<th>PART NO. = 4.3</th>
<th>J = 6</th>
<th>I = 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>α = 0°, β = 0°</td>
<td>REVISED 67</td>
<td>C1 = 0.00</td>
<td>0.01</td>
<td>1.71E 01</td>
<td>-0.01</td>
</tr>
<tr>
<td>69 1.72E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.68E 01</td>
<td>-0.02</td>
<td>1.77E 01</td>
</tr>
<tr>
<td>68 1.76E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.66E 01</td>
<td>-0.03</td>
<td>1.74E 01</td>
</tr>
<tr>
<td>67 1.67E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.63E 01</td>
<td>-0.03</td>
<td>1.72E 01</td>
</tr>
<tr>
<td>66 1.66E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.61E 01</td>
<td>-0.01</td>
<td>1.69E 01</td>
</tr>
<tr>
<td>65 1.62E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.58E 01</td>
<td>-0.00</td>
<td>1.67E 01</td>
</tr>
<tr>
<td>64 1.60E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E 01</td>
<td>0.00</td>
<td>1.64E 01</td>
</tr>
<tr>
<td>63 1.57E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.53E 01</td>
<td>0.01</td>
<td>1.62E 01</td>
</tr>
<tr>
<td>62 1.55E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.51E 01</td>
<td>0.01</td>
<td>1.59E 01</td>
</tr>
<tr>
<td>61 1.52E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.48E 01</td>
<td>0.01</td>
<td>1.57E 01</td>
</tr>
<tr>
<td>60 1.50E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.46E 01</td>
<td>-0.00</td>
<td>1.54E 01</td>
</tr>
<tr>
<td>59 1.47E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.43E 01</td>
<td>-0.00</td>
<td>1.52E 01</td>
</tr>
<tr>
<td>58 1.45E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.41E 01</td>
<td>0.00</td>
<td>1.49E 01</td>
</tr>
<tr>
<td>57 1.43E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.38E 01</td>
<td>0.00</td>
<td>1.47E 01</td>
</tr>
<tr>
<td>56 1.40E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.36E 01</td>
<td>0.00</td>
<td>1.44E 01</td>
</tr>
<tr>
<td>55 1.37E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.33E 01</td>
<td>0.01</td>
<td>1.42E 01</td>
</tr>
<tr>
<td>54 1.35E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.31E 01</td>
<td>0.02</td>
<td>1.39E 01</td>
</tr>
<tr>
<td>53 1.32E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.28E 01</td>
<td>0.02</td>
<td>1.37E 01</td>
</tr>
<tr>
<td>52 1.30E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.26E 01</td>
<td>0.03</td>
<td>1.34E 01</td>
</tr>
<tr>
<td>51 1.27E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.23E 01</td>
<td>0.02</td>
<td>1.32E 01</td>
</tr>
<tr>
<td>50 1.25E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.21E 01</td>
<td>0.01</td>
<td>1.29E 01</td>
</tr>
<tr>
<td>49 1.22E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.18E 01</td>
<td>0.01</td>
<td>1.27E 01</td>
</tr>
<tr>
<td>48 1.20E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.16E 01</td>
<td>0.00</td>
<td>1.24E 01</td>
</tr>
<tr>
<td>47 1.17E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.13E 01</td>
<td>-0.01</td>
<td>1.22E 01</td>
</tr>
<tr>
<td>46 1.15E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.11E 01</td>
<td>-0.01</td>
<td>1.19E 01</td>
</tr>
<tr>
<td>45 1.12E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.08E 01</td>
<td>-0.01</td>
<td>1.17E 01</td>
</tr>
<tr>
<td>44 1.10E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.06E 01</td>
<td>-0.01</td>
<td>1.14E 01</td>
</tr>
<tr>
<td>43 1.07E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.03E 01</td>
<td>-0.02</td>
<td>1.12E 01</td>
</tr>
<tr>
<td>42 1.05E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.01E 01</td>
<td>-0.01</td>
<td>1.09E 01</td>
</tr>
<tr>
<td>41 1.02E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>9.82E 00</td>
<td>-0.00</td>
<td>1.07E 01</td>
</tr>
<tr>
<td>40 1.00E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>9.57E 00</td>
<td>0.01</td>
<td>1.04E 01</td>
</tr>
<tr>
<td>39 9.75E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>9.32E 00</td>
<td>0.02</td>
<td>1.02E 01</td>
</tr>
<tr>
<td>38 9.50E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>9.07E 00</td>
<td>0.01</td>
<td>9.93E 00</td>
</tr>
<tr>
<td>37 9.25E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>8.82E 00</td>
<td>0.01</td>
<td>9.68E 00</td>
</tr>
<tr>
<td>36 9.00E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>8.57E 00</td>
<td>0.01</td>
<td>9.43E 00</td>
</tr>
<tr>
<td>35 8.75E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>8.32E 00</td>
<td>0.01</td>
<td>9.18E 00</td>
</tr>
<tr>
<td>34 8.50E 00</td>
<td>0.01</td>
<td>0.01</td>
<td>8.07E 00</td>
<td>0.01</td>
<td>8.93E 00</td>
</tr>
</tbody>
</table>
### TULLAHCHA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

<table>
<thead>
<tr>
<th>Model</th>
<th>Tape No.</th>
<th>Part No.</th>
<th>J</th>
<th>I</th>
<th>TAU (MSEC)</th>
<th>NRJJ (TAU)</th>
<th>NRII (TAU)</th>
<th>NRIJ (TAU)</th>
<th>TAU, C (MSEC)</th>
<th>NRIJ (TAU, C)</th>
<th>NRIJ (TAU, C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>8.25E-01</td>
<td>-0.11</td>
<td>0.05</td>
<td>7.82E-01</td>
<td>-0.00</td>
<td>8.68E-01</td>
<td>0.11</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>8.00E-01</td>
<td>-0.14</td>
<td>0.06</td>
<td>7.57E-01</td>
<td>-0.02</td>
<td>8.43E-00</td>
<td>0.06</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>7.75E-01</td>
<td>-0.11</td>
<td>0.06</td>
<td>7.32E-01</td>
<td>-0.01</td>
<td>8.18E-00</td>
<td>0.06</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>7.50E-01</td>
<td>0.01</td>
<td>0.07</td>
<td>7.07E-01</td>
<td>-0.01</td>
<td>7.93E-00</td>
<td>0.01</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>7.25E-01</td>
<td>0.08</td>
<td>0.08</td>
<td>6.82E-01</td>
<td>0.00</td>
<td>7.68E-00</td>
<td>0.08</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>7.00E-01</td>
<td>0.02</td>
<td>0.07</td>
<td>6.57E-01</td>
<td>0.02</td>
<td>7.43E-00</td>
<td>0.02</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>6.75E-01</td>
<td>0.02</td>
<td>0.07</td>
<td>6.32E-01</td>
<td>0.03</td>
<td>7.18E-00</td>
<td>0.02</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>6.50E-01</td>
<td>0.00</td>
<td>0.06</td>
<td>6.07E-01</td>
<td>0.03</td>
<td>6.93E-00</td>
<td>0.00</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>6.25E-01</td>
<td>-0.01</td>
<td>0.06</td>
<td>5.82E-01</td>
<td>0.02</td>
<td>6.68E-00</td>
<td>-0.01</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>6.00E-01</td>
<td>-0.02</td>
<td>0.06</td>
<td>5.57E-01</td>
<td>0.01</td>
<td>6.43E-00</td>
<td>-0.02</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>5.75E-01</td>
<td>-0.03</td>
<td>0.07</td>
<td>5.32E-01</td>
<td>0.00</td>
<td>6.18E-00</td>
<td>-0.03</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>5.50E-01</td>
<td>-0.02</td>
<td>0.09</td>
<td>5.07E-01</td>
<td>0.00</td>
<td>5.93E-00</td>
<td>-0.02</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>5.25E-01</td>
<td>-0.01</td>
<td>0.10</td>
<td>4.82E-01</td>
<td>0.00</td>
<td>5.68E-00</td>
<td>-0.01</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>5.00E-01</td>
<td>0.00</td>
<td>0.10</td>
<td>4.57E-01</td>
<td>0.01</td>
<td>5.43E-00</td>
<td>0.00</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>4.75E-01</td>
<td>0.01</td>
<td>0.10</td>
<td>4.32E-01</td>
<td>0.01</td>
<td>5.18E-00</td>
<td>0.01</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>4.50E-01</td>
<td>0.01</td>
<td>0.10</td>
<td>4.07E-01</td>
<td>0.01</td>
<td>4.93E-00</td>
<td>0.01</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>4.25E-01</td>
<td>0.01</td>
<td>0.11</td>
<td>3.82E-01</td>
<td>0.00</td>
<td>4.68E-00</td>
<td>0.01</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>4.00E-01</td>
<td>0.01</td>
<td>0.11</td>
<td>3.57E-01</td>
<td>0.02</td>
<td>4.43E-00</td>
<td>0.01</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>3.75E-01</td>
<td>0.02</td>
<td>0.12</td>
<td>3.32E-01</td>
<td>0.02</td>
<td>4.18E-00</td>
<td>0.02</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>3.50E-01</td>
<td>0.02</td>
<td>0.12</td>
<td>3.07E-01</td>
<td>0.02</td>
<td>3.93E-00</td>
<td>0.02</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>3.25E-01</td>
<td>-0.00</td>
<td>0.13</td>
<td>2.82E-01</td>
<td>0.03</td>
<td>3.68E-00</td>
<td>0.03</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3.00E-01</td>
<td>-0.01</td>
<td>0.13</td>
<td>2.57E-01</td>
<td>0.03</td>
<td>3.43E-00</td>
<td>0.03</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2.75E-01</td>
<td>0.00</td>
<td>0.13</td>
<td>2.32E-01</td>
<td>0.05</td>
<td>3.18E-00</td>
<td>0.05</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2.50E-01</td>
<td>0.01</td>
<td>0.14</td>
<td>2.07E-01</td>
<td>0.07</td>
<td>2.93E-00</td>
<td>0.07</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2.25E-01</td>
<td>0.00</td>
<td>0.16</td>
<td>1.82E-01</td>
<td>0.12</td>
<td>2.68E-00</td>
<td>0.12</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2.00E-01</td>
<td>-0.02</td>
<td>0.16</td>
<td>1.57E-01</td>
<td>0.19</td>
<td>2.43E-00</td>
<td>0.19</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1.75E-01</td>
<td>-0.06</td>
<td>0.16</td>
<td>1.32E-01</td>
<td>0.26</td>
<td>2.18E-00</td>
<td>0.26</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1.50E-01</td>
<td>-0.12</td>
<td>0.15</td>
<td>1.07E-01</td>
<td>0.29</td>
<td>1.93E-00</td>
<td>0.29</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.25E-01</td>
<td>-0.20</td>
<td>0.12</td>
<td>8.27E-01</td>
<td>0.17</td>
<td>1.68E-00</td>
<td>0.17</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1.00E-01</td>
<td>-0.23</td>
<td>0.13</td>
<td>6.72E-01</td>
<td>-0.14</td>
<td>1.43E-00</td>
<td>-0.14</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>7.50E-01</td>
<td>-0.14</td>
<td>0.18</td>
<td>5.22E-01</td>
<td>-0.45</td>
<td>1.18E-00</td>
<td>-0.45</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>5.00E-01</td>
<td>0.16</td>
<td>0.32</td>
<td>7.20E-02</td>
<td>-0.48</td>
<td>9.28E-01</td>
<td>-0.48</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2.50E-01</td>
<td>0.70</td>
<td>0.71</td>
<td>1.78E-01</td>
<td>-0.26</td>
<td>6.78E-01</td>
<td>-0.26</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0.00</td>
<td>1.00</td>
<td>1.00</td>
<td>-4.28E-01</td>
<td>-0.04</td>
<td>4.28E-01</td>
<td>-0.04</td>
<td>4.43E-00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SPECTRAL DATA**

**TULLAHOA 32 PERCENT MERCURY**

**FLUCTUATING PRESSURE TEST**

\[ \alpha = 0^0, \beta = 0^0 \]

**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**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PROTOTYPE</th>
<th>REDUCED</th>
<th>S.F.</th>
<th>XSIJ(F)</th>
<th>S.F.</th>
<th>XSIJ(F)</th>
<th>NCIIJ(F)</th>
<th>NCIIJ(F)</th>
<th>MOD. OF PHASE OF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQ.</td>
<td>FREQ.</td>
<td>FREQ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>C</td>
<td>6.94E-03</td>
<td>1.46E-02</td>
<td>0.09</td>
<td>0.09</td>
<td>0.10</td>
<td>360.00</td>
<td></td>
</tr>
<tr>
<td>28.57</td>
<td>8.51</td>
<td>0.05</td>
<td>1.91E-02</td>
<td>2.20E-02</td>
<td>0.04</td>
<td>0.09</td>
<td>0.10</td>
<td>65.85</td>
<td></td>
</tr>
<tr>
<td>57.14</td>
<td>17.02</td>
<td>0.14</td>
<td>1.65E-02</td>
<td>8.79E-03</td>
<td>0.19</td>
<td>0.20</td>
<td>0.21</td>
<td>188.30</td>
<td></td>
</tr>
<tr>
<td>85.71</td>
<td>25.53</td>
<td>0.19</td>
<td>1.88E-02</td>
<td>7.10E-03</td>
<td>0.31</td>
<td>0.31</td>
<td>0.44</td>
<td>134.41</td>
<td></td>
</tr>
<tr>
<td>114.29</td>
<td>34.03</td>
<td>0.24</td>
<td>1.99E-02</td>
<td>5.28E-03</td>
<td>0.41</td>
<td>0.28</td>
<td>0.49</td>
<td>145.95</td>
<td></td>
</tr>
<tr>
<td>142.86</td>
<td>42.54</td>
<td>0.29</td>
<td>2.35E-02</td>
<td>6.47E-03</td>
<td>0.52</td>
<td>0.25</td>
<td>0.58</td>
<td>154.20</td>
<td></td>
</tr>
<tr>
<td>171.43</td>
<td>51.05</td>
<td>0.34</td>
<td>2.63E-02</td>
<td>6.12E-03</td>
<td>0.61</td>
<td>0.18</td>
<td>0.63</td>
<td>163.48</td>
<td></td>
</tr>
<tr>
<td>200.00</td>
<td>59.56</td>
<td>0.39</td>
<td>2.94E-02</td>
<td>6.25E-03</td>
<td>0.68</td>
<td>0.06</td>
<td>0.68</td>
<td>175.12</td>
<td></td>
</tr>
<tr>
<td>228.57</td>
<td>68.07</td>
<td>0.43</td>
<td>3.52E-02</td>
<td>6.88E-03</td>
<td>0.75</td>
<td>0.02</td>
<td>0.75</td>
<td>178.24</td>
<td></td>
</tr>
<tr>
<td>257.14</td>
<td>76.58</td>
<td>0.48</td>
<td>3.75E-02</td>
<td>6.43E-03</td>
<td>0.77</td>
<td>0.01</td>
<td>0.77</td>
<td>180.37</td>
<td></td>
</tr>
<tr>
<td>285.71</td>
<td>85.09</td>
<td>0.53</td>
<td>3.91E-02</td>
<td>6.68E-03</td>
<td>0.75</td>
<td>0.07</td>
<td>0.76</td>
<td>185.14</td>
<td></td>
</tr>
<tr>
<td>314.29</td>
<td>93.59</td>
<td>0.58</td>
<td>3.99E-02</td>
<td>6.73E-03</td>
<td>0.76</td>
<td>0.07</td>
<td>0.76</td>
<td>187.05</td>
<td></td>
</tr>
<tr>
<td>342.86</td>
<td>102.10</td>
<td>0.63</td>
<td>3.40E-02</td>
<td>5.86E-03</td>
<td>0.76</td>
<td>0.07</td>
<td>0.76</td>
<td>191.54</td>
<td></td>
</tr>
<tr>
<td>371.43</td>
<td>110.61</td>
<td>0.68</td>
<td>3.70E-02</td>
<td>6.28E-03</td>
<td>0.74</td>
<td>0.24</td>
<td>0.77</td>
<td>198.32</td>
<td></td>
</tr>
<tr>
<td>400.00</td>
<td>119.12</td>
<td>0.72</td>
<td>3.93E-02</td>
<td>6.50E-03</td>
<td>0.72</td>
<td>0.29</td>
<td>0.77</td>
<td>202.09</td>
<td></td>
</tr>
<tr>
<td>428.57</td>
<td>127.63</td>
<td>0.77</td>
<td>3.87E-02</td>
<td>5.80E-03</td>
<td>0.72</td>
<td>0.29</td>
<td>0.77</td>
<td>206.41</td>
<td></td>
</tr>
<tr>
<td>457.14</td>
<td>136.14</td>
<td>0.82</td>
<td>3.10E-02</td>
<td>5.25E-03</td>
<td>0.68</td>
<td>0.34</td>
<td>0.76</td>
<td>206.29</td>
<td></td>
</tr>
<tr>
<td>485.71</td>
<td>144.65</td>
<td>0.87</td>
<td>3.04E-02</td>
<td>4.15E-03</td>
<td>0.67</td>
<td>0.35</td>
<td>0.75</td>
<td>207.58</td>
<td></td>
</tr>
<tr>
<td>514.29</td>
<td>153.15</td>
<td>0.92</td>
<td>2.74E-02</td>
<td>4.56E-03</td>
<td>0.65</td>
<td>0.39</td>
<td>0.75</td>
<td>210.85</td>
<td></td>
</tr>
<tr>
<td>542.86</td>
<td>161.66</td>
<td>0.97</td>
<td>2.54E-02</td>
<td>4.87E-03</td>
<td>0.62</td>
<td>0.42</td>
<td>0.75</td>
<td>214.46</td>
<td></td>
</tr>
<tr>
<td>571.43</td>
<td>170.17</td>
<td>1.02</td>
<td>2.47E-02</td>
<td>4.51E-03</td>
<td>0.57</td>
<td>0.45</td>
<td>0.72</td>
<td>218.26</td>
<td></td>
</tr>
<tr>
<td>600.00</td>
<td>178.68</td>
<td>1.07</td>
<td>2.24E-02</td>
<td>3.72E-03</td>
<td>0.50</td>
<td>0.44</td>
<td>0.67</td>
<td>221.31</td>
<td></td>
</tr>
<tr>
<td>628.57</td>
<td>187.19</td>
<td>1.12</td>
<td>1.92E-02</td>
<td>3.18E-03</td>
<td>0.42</td>
<td>0.45</td>
<td>0.62</td>
<td>227.14</td>
<td></td>
</tr>
<tr>
<td>657.14</td>
<td>195.70</td>
<td>1.17</td>
<td>1.65E-02</td>
<td>3.19E-03</td>
<td>0.38</td>
<td>0.52</td>
<td>0.64</td>
<td>233.81</td>
<td></td>
</tr>
<tr>
<td>685.71</td>
<td>204.21</td>
<td>1.22</td>
<td>1.50E-02</td>
<td>3.05E-03</td>
<td>0.35</td>
<td>0.52</td>
<td>0.63</td>
<td>236.25</td>
<td></td>
</tr>
<tr>
<td>714.29</td>
<td>212.71</td>
<td>1.27</td>
<td>1.32E-02</td>
<td>2.70E-03</td>
<td>0.30</td>
<td>0.52</td>
<td>0.60</td>
<td>240.26</td>
<td></td>
</tr>
<tr>
<td>742.86</td>
<td>221.22</td>
<td>1.32</td>
<td>1.16E-02</td>
<td>2.53E-03</td>
<td>0.26</td>
<td>0.54</td>
<td>0.60</td>
<td>244.67</td>
<td></td>
</tr>
<tr>
<td>771.43</td>
<td>229.73</td>
<td>1.37</td>
<td>1.00E-02</td>
<td>2.47E-03</td>
<td>0.24</td>
<td>0.58</td>
<td>0.63</td>
<td>247.52</td>
<td></td>
</tr>
<tr>
<td>800.00</td>
<td>238.24</td>
<td>1.42</td>
<td>1.00E-02</td>
<td>2.33E-03</td>
<td>0.24</td>
<td>0.58</td>
<td>0.63</td>
<td>247.42</td>
<td></td>
</tr>
<tr>
<td>828.57</td>
<td>246.75</td>
<td>1.47</td>
<td>8.62E-03</td>
<td>2.10E-03</td>
<td>0.22</td>
<td>0.51</td>
<td>0.55</td>
<td>246.10</td>
<td></td>
</tr>
<tr>
<td>857.14</td>
<td>255.26</td>
<td>1.52</td>
<td>6.99E-03</td>
<td>1.99E-03</td>
<td>0.16</td>
<td>0.47</td>
<td>0.49</td>
<td>251.38</td>
<td></td>
</tr>
<tr>
<td>885.71</td>
<td>263.77</td>
<td>1.57</td>
<td>6.06E-03</td>
<td>1.87E-03</td>
<td>0.09</td>
<td>0.50</td>
<td>0.51</td>
<td>260.10</td>
<td></td>
</tr>
<tr>
<td>914.29</td>
<td>272.27</td>
<td>1.62</td>
<td>5.46E-03</td>
<td>1.73E-03</td>
<td>0.01</td>
<td>0.41</td>
<td>0.41</td>
<td>269.19</td>
<td></td>
</tr>
<tr>
<td>942.86</td>
<td>280.78</td>
<td>1.67</td>
<td>4.86E-03</td>
<td>1.55E-03</td>
<td>0.01</td>
<td>0.33</td>
<td>0.33</td>
<td>268.45</td>
<td></td>
</tr>
</tbody>
</table>
## TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

**Configuration:** MA-2  
**Mach No.:** 1.0  
**Tape No.:** 2.0  
**Part No.:** 4.3  
**J:** 6  
**I:** 9

<table>
<thead>
<tr>
<th>Tau (MSEC)</th>
<th>NRJ (TAU)</th>
<th>NRJ (TAU) + Tau C (MSEC)</th>
<th>NRJ (TAU+C)</th>
<th>Tau C (MSEC)</th>
<th>NRJ (Tau-C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7C 1.75E C1</td>
<td>-0.00</td>
<td>1.71E C1</td>
<td>-0.01</td>
<td>1.79E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>65 1.27E C1</td>
<td>-0.00</td>
<td>1.68E C1</td>
<td>-0.01</td>
<td>1.77E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>66 1.27E C1</td>
<td>-0.00</td>
<td>1.68E C1</td>
<td>-0.01</td>
<td>1.77E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>67 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>68 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>69 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>70 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>71 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>72 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>73 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>74 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>75 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>76 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>77 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>78 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>79 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>80 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>81 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>82 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>83 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>84 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>85 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>86 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>87 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>88 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>89 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>90 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>91 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>92 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>93 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>94 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>95 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>96 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>97 1.57E C1</td>
<td>-0.00</td>
<td>1.63E C1</td>
<td>-0.01</td>
<td>1.72E C1</td>
<td>-0.01</td>
</tr>
</tbody>
</table>
### 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= 6**  
**I = 9**

<table>
<thead>
<tr>
<th>TAU(MSEC)</th>
<th>NRJ(0)</th>
<th>NRJII(0)</th>
<th>NRJII(0) + TAU,C(MSEC)</th>
<th>NRJ+TAU,C</th>
<th>-TAU,C(MSEC)</th>
<th>NRJ(-TAU,C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 8.25E OC</td>
<td>0.00</td>
<td>0.02</td>
<td>7.83E CC</td>
<td>0.02</td>
<td>8.67E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>32 8.00E OC</td>
<td>0.00</td>
<td>0.02</td>
<td>7.58E 00</td>
<td>0.02</td>
<td>8.42E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>31 7.75E OC</td>
<td>0.01</td>
<td>0.01</td>
<td>7.33E 00</td>
<td>-0.00</td>
<td>8.17E 00</td>
<td>-0.02</td>
</tr>
<tr>
<td>30 7.50E OC</td>
<td>0.01</td>
<td>0.01</td>
<td>7.08E 00</td>
<td>-0.02</td>
<td>7.92E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>29 7.25E OC</td>
<td>-0.01</td>
<td>0.01</td>
<td>6.83E 00</td>
<td>-0.03</td>
<td>7.67E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>28 7.00E OC</td>
<td>-0.02</td>
<td>-0.00</td>
<td>6.58E 00</td>
<td>-0.03</td>
<td>7.42E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>27 6.75E OC</td>
<td>-0.02</td>
<td>-0.00</td>
<td>6.33E 00</td>
<td>-0.01</td>
<td>7.17E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>26 6.50E OC</td>
<td>-0.01</td>
<td>-0.00</td>
<td>6.08E 00</td>
<td>0.00</td>
<td>6.92E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>25 6.25E OC</td>
<td>-0.01</td>
<td>-0.00</td>
<td>5.83E 00</td>
<td>0.01</td>
<td>6.67E 00</td>
<td>-0.00</td>
</tr>
<tr>
<td>24 6.00E OC</td>
<td>-0.01</td>
<td>-0.00</td>
<td>5.58E 00</td>
<td>0.02</td>
<td>6.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>23 5.75E OC</td>
<td>-0.02</td>
<td>-0.00</td>
<td>5.33E 00</td>
<td>0.03</td>
<td>6.17E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>22 5.50E OC</td>
<td>-0.02</td>
<td>-0.00</td>
<td>5.08E 00</td>
<td>0.03</td>
<td>5.92E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>21 5.25E OC</td>
<td>-0.01</td>
<td>-0.00</td>
<td>4.83E 00</td>
<td>0.04</td>
<td>5.67E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>20 5.00E OC</td>
<td>0.02</td>
<td>0.02</td>
<td>4.58E 00</td>
<td>0.04</td>
<td>5.42E 00</td>
<td>0.02</td>
</tr>
<tr>
<td>19 4.75E OC</td>
<td>0.02</td>
<td>0.02</td>
<td>4.33E 00</td>
<td>0.03</td>
<td>5.17E 00</td>
<td>0.02</td>
</tr>
<tr>
<td>18 4.50E OC</td>
<td>0.02</td>
<td>0.02</td>
<td>4.08E 00</td>
<td>0.04</td>
<td>4.92E 00</td>
<td>0.02</td>
</tr>
<tr>
<td>17 4.25E OC</td>
<td>0.02</td>
<td>0.03</td>
<td>3.83E 00</td>
<td>0.05</td>
<td>4.67E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>16 4.00E OC</td>
<td>0.00</td>
<td>0.03</td>
<td>3.58E 00</td>
<td>0.08</td>
<td>4.42E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>15 3.75E OC</td>
<td>0.00</td>
<td>0.03</td>
<td>3.33E 00</td>
<td>0.09</td>
<td>4.17E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>14 3.50E OC</td>
<td>0.00</td>
<td>0.04</td>
<td>3.08E 00</td>
<td>0.07</td>
<td>3.92E 00</td>
<td>0.02</td>
</tr>
<tr>
<td>13 3.25E OC</td>
<td>0.01</td>
<td>0.04</td>
<td>2.83E 00</td>
<td>0.08</td>
<td>3.67E 00</td>
<td>0.02</td>
</tr>
<tr>
<td>12 3.00E OC</td>
<td>0.02</td>
<td>0.04</td>
<td>2.58E 00</td>
<td>0.11</td>
<td>3.42E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>11 2.75E OC</td>
<td>0.02</td>
<td>0.03</td>
<td>2.33E 00</td>
<td>0.24</td>
<td>3.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>10 2.50E OC</td>
<td>0.02</td>
<td>0.02</td>
<td>2.08E 00</td>
<td>0.29</td>
<td>2.92E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>9 2.25E OC</td>
<td>0.02</td>
<td>0.01</td>
<td>1.83E 00</td>
<td>0.21</td>
<td>2.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>8 2.00E OC</td>
<td>0.03</td>
<td>0.00</td>
<td>1.58E 00</td>
<td>0.04</td>
<td>2.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>7 1.75E OC</td>
<td>0.06</td>
<td>0.01</td>
<td>1.33E 00</td>
<td>0.12</td>
<td>2.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>6 1.50E OC</td>
<td>0.11</td>
<td>0.01</td>
<td>1.08E 00</td>
<td>0.17</td>
<td>1.92E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>5 1.25E OC</td>
<td>0.20</td>
<td>0.06</td>
<td>0.83E-01</td>
<td>0.13</td>
<td>1.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>4 1.00E-01</td>
<td>0.24</td>
<td>-0.07</td>
<td>0.57E-01</td>
<td>0.06</td>
<td>1.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>3 7.50E-01</td>
<td>0.16</td>
<td>-0.06</td>
<td>0.32E-01</td>
<td>0.00</td>
<td>1.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>2 5.00E-01</td>
<td>0.16</td>
<td>0.08</td>
<td>0.78E-02</td>
<td>0.02</td>
<td>9.22E-01</td>
<td>0.00</td>
</tr>
<tr>
<td>1 2.50E-01</td>
<td>0.65</td>
<td>0.61</td>
<td>-1.72E-01</td>
<td>-0.02</td>
<td>6.72E-01</td>
<td>-0.01</td>
</tr>
<tr>
<td>0 0.</td>
<td>1.00</td>
<td>1.00</td>
<td>-4.22E-01</td>
<td>-0.02</td>
<td>4.22E-01</td>
<td>-0.01</td>
</tr>
</tbody>
</table>
SPECTRAL DATA

TULLAHOMA 32 PERCENT MERCURY
FLUCTUATING PRESSURE TEST

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

CONFIG. MA-2 $MACH NO. = 1.0$ TAPE NO. = 2.0 PART NO. = 4.3 $J = 6$ $I = 9$

MODEL FREQ., $S.F. = 8.81$ PROTOTYPE FREQ., $S.F. = 7.62$ REDUCED FREQ., $S.F. = 1.00$

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PROTOTYPE</th>
<th>REDUCED</th>
<th>S.F.</th>
<th>XSJ(F)</th>
<th>S.F.</th>
<th>XSII(F)</th>
<th>NCIJ(F)</th>
<th>NCIJ(F)</th>
<th>MCD.</th>
<th>CF PHASE OF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQ.</td>
<td>FREQ.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 0.0  | 0.0  | 6.94E-03 | 3.57E-03 | -0.01 | 0.0  | 0.01    | 180.00  |
| 28.57| 8.51| 1.47E-02 | 6.25E-03 | -0.06 | -0.06| 0.01    | 271.13  |
| 57.14| 17.02| 1.56E-02 | 5.43E-03 | -0.10 | -0.18| 0.21    | 241.37  |
| 85.71| 25.59| 1.60E-02 | 4.56E-03 | -0.08 | -0.24| 0.25    | 251.88  |
| 114.29| 34.03| 1.66E-02 | 4.31E-03 | -0.04 | -0.14| 0.15    | 254.68  |
| 142.86| 42.54| 1.79E-02 | 4.56E-03 | -0.05 | -0.09| 0.10    | 256.76  |
| 171.43| 51.05| 2.15E-02 | 4.57E-03 | 0.20  | -0.15| 0.25    | 323.04  |
| 200.00| 59.56| 2.67E-02 | 5.56E-03 | 0.34  | -0.14| 0.37    | 337.56  |
| 228.57| 68.07| 3.19E-02 | 6.15E-03 | 0.38  | 0.00 | 0.38    | 5.56    |
| 257.14| 76.58| 3.48E-02 | 6.56E-03 | 0.35  | 0.22 | 0.41    | 21.67   |
| 285.71| 85.05| 3.43E-02 | 6.53E-03 | 0.25  | 0.39 | 0.46    | 56.71   |
| 314.29| 93.59| 3.41E-02 | 6.25E-03 | 0.10  | 0.43 | 0.44    | 77.06   |
| 342.86| 102.10| 3.66E-02 | 6.38E-03 | -0.06 | 0.44 | 0.44    | 98.15   |
| 371.43| 110.61| 3.85E-02 | 6.57E-03 | -0.20 | 0.44 | 0.48    | 114.02  |
| 400.00| 119.12| 3.83E-02 | 6.27E-03 | -0.33 | 0.33 | 0.47    | 129.13  |
| 429.57| 127.63| 3.81E-02 | 5.73E-03 | -0.45 | 0.17 | 0.48    | 159.06  |
| 457.14| 136.14| 3.56E-02 | 5.79E-03 | -0.44 | 0.02 | 0.44    | 177.18  |
| 485.71| 144.65| 3.17E-02 | 5.74E-03 | -0.37 | -0.08| 0.38    | 152.98  |
| 514.29| 153.15| 2.84E-02 | 5.37E-03 | -0.33 | -0.14| 0.36    | 230.05  |
| 542.86| 161.66| 2.52E-02 | 5.09E-03 | -0.27 | -0.24| 0.36    | 221.60  |
| 571.43| 170.17| 2.42E-02 | 5.14E-03 | -0.15 | -0.32| 0.35    | 244.62  |
| 600.00| 178.68| 2.38E-02 | 4.94E-03 | -0.06 | -0.34| 0.35    | 259.60  |
| 628.57| 187.19| 2.28E-02 | 4.65E-03 | 0.01  | -0.33| 0.33    | 271.24  |
| 657.14| 195.70| 2.14E-02 | 4.33E-03 | 0.12  | -0.22| 0.25    | 257.85  |
| 685.71| 204.21| 1.92E-02 | 4.31E-03 | 0.18  | -0.10| 0.21    | 331.32  |
| 714.29| 212.71| 1.72E-02 | 4.10E-03 | 0.14  | -0.04| 0.15    | 344.76  |
| 742.86| 221.22| 1.23E-02 | 3.54E-03 | 0.12  | 0.01 | 0.12    | 5.07    |
| 771.43| 229.72| 1.17E-02 | 3.29E-03 | 0.18  | 0.02 | 0.18    | 6.26    |
| 800.00| 238.24| 1.10E-02 | 3.08E-03 | 0.19  | 0.05 | 0.20    | 14.70   |
| 828.57| 246.75| 9.77E-03 | 2.91E-03 | 0.14  | 0.09 | 0.16    | 33.65   |
| 857.14| 255.26| 8.33E-03 | 2.83E-03 | 0.07  | 0.12 | 0.13    | 60.43   |
| 885.71| 263.77| 7.03E-03 | 2.54E-03 | 0.03  | 0.11 | 0.12    | 72.34   |
| 914.29| 272.27| 6.12E-03 | 2.30E-03 | -0.01 | 0.09 | 0.09    | 54.91   |
| 942.86| 280.78| 5.14E-03 | 2.29E-03 | -0.02 | 0.08 | 0.10    | 98.62   |
| 971.43| 289.29| 4.18E-03 | 2.23E-03 | -0.02 | 0.01 | 0.02    | 145.88  |
| 1000.00| 297.80| 4.19E-03 | 1.91E-03 | -0.06 | -0.09| 0.11    | 234.28  |
### TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

**Configuration:** MA-2  
**Manufacturer:** MCDONNELL  
**Location:** ST. LOUIS, MISSOURI

#### Data Table

<table>
<thead>
<tr>
<th>TAU(MSFC)</th>
<th>NRJJ(TAU)</th>
<th>NRJ(TAU)</th>
<th>+TAU(C(MSEC))</th>
<th>AJJ(TAU,C)</th>
<th>-TAU(C(MSEC))</th>
<th>NRJJ(-TAU,C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>1.75E01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>1.71E01</td>
<td>-0.01</td>
<td>1.79E01</td>
</tr>
<tr>
<td>69</td>
<td>1.72E01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>1.69E01</td>
<td>-0.01</td>
<td>1.76E01</td>
</tr>
<tr>
<td>68</td>
<td>1.76E01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.76E01</td>
<td>-0.01</td>
<td>1.74E01</td>
</tr>
<tr>
<td>67</td>
<td>1.67E01</td>
<td>0.00</td>
<td>-0.01</td>
<td>1.64E01</td>
<td>0.00</td>
<td>1.71E01</td>
</tr>
<tr>
<td>66</td>
<td>1.65E01</td>
<td>-0.00</td>
<td>0.00</td>
<td>1.64E01</td>
<td>0.00</td>
<td>1.68E01</td>
</tr>
<tr>
<td>65</td>
<td>1.62E01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.59E01</td>
<td>-0.01</td>
<td>1.66E01</td>
</tr>
<tr>
<td>64</td>
<td>1.66E01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E01</td>
<td>-0.01</td>
<td>1.64E01</td>
</tr>
<tr>
<td>63</td>
<td>1.57E01</td>
<td>0.01</td>
<td>0.02</td>
<td>1.54E01</td>
<td>-0.01</td>
<td>1.61E01</td>
</tr>
<tr>
<td>62</td>
<td>1.55E01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.51E01</td>
<td>0.00</td>
<td>1.59E01</td>
</tr>
<tr>
<td>61</td>
<td>1.52E01</td>
<td>-0.02</td>
<td>0.02</td>
<td>1.49E01</td>
<td>0.01</td>
<td>1.56E01</td>
</tr>
<tr>
<td>60</td>
<td>1.50E01</td>
<td>-0.01</td>
<td>0.00</td>
<td>1.46E01</td>
<td>0.01</td>
<td>1.54E01</td>
</tr>
<tr>
<td>59</td>
<td>1.47E01</td>
<td>-0.01</td>
<td>0.00</td>
<td>1.44E01</td>
<td>0.01</td>
<td>1.51E01</td>
</tr>
<tr>
<td>58</td>
<td>1.45E01</td>
<td>-0.01</td>
<td>0.00</td>
<td>1.41E01</td>
<td>0.01</td>
<td>1.49E01</td>
</tr>
<tr>
<td>57</td>
<td>1.42E01</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.39E01</td>
<td>-0.00</td>
<td>1.46E01</td>
</tr>
<tr>
<td>56</td>
<td>1.40E01</td>
<td>-0.01</td>
<td>0.02</td>
<td>1.36E01</td>
<td>-0.00</td>
<td>1.44E01</td>
</tr>
<tr>
<td>55</td>
<td>1.37E01</td>
<td>-0.01</td>
<td>0.02</td>
<td>1.34E01</td>
<td>-0.00</td>
<td>1.41E01</td>
</tr>
<tr>
<td>54</td>
<td>1.35E01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.31E01</td>
<td>-0.00</td>
<td>1.39E01</td>
</tr>
<tr>
<td>53</td>
<td>1.32E01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.29E01</td>
<td>-0.00</td>
<td>1.36E01</td>
</tr>
<tr>
<td>52</td>
<td>1.30E01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.26E01</td>
<td>0.00</td>
<td>1.34E01</td>
</tr>
<tr>
<td>51</td>
<td>1.27E01</td>
<td>-0.01</td>
<td>0.00</td>
<td>1.24E01</td>
<td>0.01</td>
<td>1.31E01</td>
</tr>
<tr>
<td>50</td>
<td>1.25E01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.21E01</td>
<td>0.01</td>
<td>1.29E01</td>
</tr>
<tr>
<td>49</td>
<td>1.22E01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.19E01</td>
<td>0.01</td>
<td>1.26E01</td>
</tr>
<tr>
<td>48</td>
<td>1.20E01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.16E01</td>
<td>0.02</td>
<td>1.24E01</td>
</tr>
<tr>
<td>47</td>
<td>1.17E01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.14E01</td>
<td>0.00</td>
<td>1.21E01</td>
</tr>
<tr>
<td>46</td>
<td>1.15E01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.11E01</td>
<td>0.00</td>
<td>1.19E01</td>
</tr>
<tr>
<td>45</td>
<td>1.12E01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.09E01</td>
<td>0.01</td>
<td>1.16E01</td>
</tr>
<tr>
<td>44</td>
<td>1.10E01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.06E01</td>
<td>0.02</td>
<td>1.14E01</td>
</tr>
<tr>
<td>43</td>
<td>1.07E01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.04E01</td>
<td>-0.03</td>
<td>1.11E01</td>
</tr>
<tr>
<td>42</td>
<td>1.05E01</td>
<td>0.01</td>
<td>0.00</td>
<td>1.01E01</td>
<td>-0.01</td>
<td>1.09E01</td>
</tr>
<tr>
<td>41</td>
<td>1.02E01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.98E01</td>
<td>0.01</td>
<td>1.06E01</td>
</tr>
<tr>
<td>40</td>
<td>1.00E00</td>
<td>0.00</td>
<td>0.02</td>
<td>0.96E00</td>
<td>0.00</td>
<td>1.04E01</td>
</tr>
<tr>
<td>39</td>
<td>9.75E-01</td>
<td>0.00</td>
<td>0.00</td>
<td>9.36E00</td>
<td>-0.01</td>
<td>1.01E01</td>
</tr>
<tr>
<td>38</td>
<td>9.55E-01</td>
<td>0.00</td>
<td>0.00</td>
<td>9.11E00</td>
<td>-0.01</td>
<td>9.89E00</td>
</tr>
<tr>
<td>37</td>
<td>9.25E-01</td>
<td>0.00</td>
<td>0.00</td>
<td>8.86E00</td>
<td>-0.00</td>
<td>9.64E00</td>
</tr>
<tr>
<td>36</td>
<td>9.05E-01</td>
<td>0.00</td>
<td>0.00</td>
<td>8.61E00</td>
<td>-0.00</td>
<td>9.39E00</td>
</tr>
<tr>
<td>35</td>
<td>8.75E-01</td>
<td>0.00</td>
<td>0.00</td>
<td>8.36E00</td>
<td>0.00</td>
<td>9.14E00</td>
</tr>
<tr>
<td>34</td>
<td>8.50E-01</td>
<td>0.00</td>
<td>0.01</td>
<td>8.11E00</td>
<td>0.00</td>
<td>8.89E00</td>
</tr>
</tbody>
</table>

**Notes:**
- **α = 0°, β = 0°**
- **MACH NO. = 1.0**
- **TAPE NO. = 2.0**
- **PART NO. = 4.3**
- **J = 8, I = 9**
- **RJJ1(0) = 6.0287E-01**
- **RJII(0) = 6.0892E-01**
**CORRELATION DATA**

**TULLAHOMA 32 PERCENT MERCURY**

**FLUCTUATING PRESSURF TEST**

\[ \alpha = 0^\circ, \beta = 0^\circ \]

**CONFIG. MA-2**

<table>
<thead>
<tr>
<th>L</th>
<th>TAU(MSEC)</th>
<th>ARJJ(TAU)</th>
<th>NRIJ(TAU)</th>
<th>NRIJ(TAU)</th>
<th>NRIJ(TAU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>8.25E-01</td>
<td>0.01</td>
<td>7.86E-01</td>
<td>-0.01</td>
<td>8.64E-01</td>
</tr>
<tr>
<td>32</td>
<td>8.00E-01</td>
<td>0.01</td>
<td>7.61E-01</td>
<td>-0.01</td>
<td>8.39E-01</td>
</tr>
<tr>
<td>31</td>
<td>7.75E-01</td>
<td>0.02</td>
<td>7.36E-01</td>
<td>-0.01</td>
<td>8.15E-01</td>
</tr>
<tr>
<td>30</td>
<td>7.50E-01</td>
<td>0.01</td>
<td>7.11E-01</td>
<td>-0.01</td>
<td>7.91E-01</td>
</tr>
<tr>
<td>29</td>
<td>7.25E-01</td>
<td>0.01</td>
<td>6.86E-01</td>
<td>-0.01</td>
<td>7.66E-01</td>
</tr>
<tr>
<td>28</td>
<td>7.00E-01</td>
<td>0.02</td>
<td>6.61E-01</td>
<td>0.00</td>
<td>7.39E-01</td>
</tr>
<tr>
<td>27</td>
<td>6.75E-01</td>
<td>0.01</td>
<td>6.36E-01</td>
<td>0.00</td>
<td>7.14E-01</td>
</tr>
<tr>
<td>26</td>
<td>6.50E-01</td>
<td>0.01</td>
<td>6.11E-01</td>
<td>0.00</td>
<td>5.89E-01</td>
</tr>
<tr>
<td>25</td>
<td>6.25E-01</td>
<td>0.01</td>
<td>5.86E-01</td>
<td>0.00</td>
<td>5.64E-01</td>
</tr>
<tr>
<td>24</td>
<td>6.00E-01</td>
<td>0.00</td>
<td>5.61E-01</td>
<td>0.00</td>
<td>6.39E-01</td>
</tr>
<tr>
<td>23</td>
<td>5.75E-01</td>
<td>0.00</td>
<td>5.36E-01</td>
<td>0.00</td>
<td>6.14E-01</td>
</tr>
<tr>
<td>22</td>
<td>5.50E-01</td>
<td>0.00</td>
<td>5.11E-01</td>
<td>0.00</td>
<td>5.89E-01</td>
</tr>
<tr>
<td>21</td>
<td>5.25E-01</td>
<td>0.00</td>
<td>4.86E-01</td>
<td>0.00</td>
<td>5.64E-01</td>
</tr>
<tr>
<td>20</td>
<td>5.00E-01</td>
<td>0.00</td>
<td>4.61E-01</td>
<td>0.00</td>
<td>5.39E-01</td>
</tr>
<tr>
<td>19</td>
<td>4.75E-01</td>
<td>0.00</td>
<td>4.36E-01</td>
<td>0.00</td>
<td>5.14E-01</td>
</tr>
<tr>
<td>18</td>
<td>4.50E-01</td>
<td>0.00</td>
<td>4.11E-01</td>
<td>0.00</td>
<td>4.89E-01</td>
</tr>
<tr>
<td>17</td>
<td>4.25E-01</td>
<td>0.00</td>
<td>3.86E-01</td>
<td>0.00</td>
<td>4.64E-01</td>
</tr>
<tr>
<td>16</td>
<td>4.00E-01</td>
<td>0.00</td>
<td>3.61E-01</td>
<td>0.00</td>
<td>4.39E-01</td>
</tr>
<tr>
<td>15</td>
<td>3.75E-01</td>
<td>0.00</td>
<td>3.36E-01</td>
<td>0.00</td>
<td>4.14E-01</td>
</tr>
<tr>
<td>14</td>
<td>3.50E-01</td>
<td>0.00</td>
<td>3.11E-01</td>
<td>0.00</td>
<td>3.89E-01</td>
</tr>
<tr>
<td>13</td>
<td>3.25E-01</td>
<td>0.00</td>
<td>2.86E-01</td>
<td>0.00</td>
<td>3.64E-01</td>
</tr>
<tr>
<td>12</td>
<td>3.00E-01</td>
<td>0.00</td>
<td>2.61E-01</td>
<td>0.00</td>
<td>3.39E-01</td>
</tr>
<tr>
<td>11</td>
<td>2.75E-01</td>
<td>0.00</td>
<td>2.36E-01</td>
<td>0.00</td>
<td>3.14E-01</td>
</tr>
<tr>
<td>10</td>
<td>2.50E-01</td>
<td>0.00</td>
<td>2.11E-01</td>
<td>0.00</td>
<td>2.89E-01</td>
</tr>
<tr>
<td>9</td>
<td>2.25E-01</td>
<td>0.00</td>
<td>1.86E-01</td>
<td>0.00</td>
<td>2.64E-01</td>
</tr>
<tr>
<td>8</td>
<td>2.00E-01</td>
<td>0.00</td>
<td>1.61E-01</td>
<td>0.00</td>
<td>2.39E-01</td>
</tr>
<tr>
<td>7</td>
<td>1.75E-01</td>
<td>0.00</td>
<td>1.36E-01</td>
<td>0.00</td>
<td>2.14E-01</td>
</tr>
<tr>
<td>6</td>
<td>1.50E-01</td>
<td>0.00</td>
<td>1.11E-01</td>
<td>0.00</td>
<td>1.89E-01</td>
</tr>
<tr>
<td>5</td>
<td>1.25E-01</td>
<td>0.00</td>
<td>0.86E-01</td>
<td>0.00</td>
<td>1.64E-01</td>
</tr>
<tr>
<td>4</td>
<td>1.00E-01</td>
<td>0.00</td>
<td>0.61E-01</td>
<td>0.00</td>
<td>1.39E-01</td>
</tr>
<tr>
<td>3</td>
<td>7.50E-01</td>
<td>0.00</td>
<td>0.36E-01</td>
<td>0.00</td>
<td>1.14E-01</td>
</tr>
<tr>
<td>2</td>
<td>5.00E-01</td>
<td>0.00</td>
<td>0.11E-01</td>
<td>0.00</td>
<td>8.89E-01</td>
</tr>
<tr>
<td>1</td>
<td>2.50E-01</td>
<td>0.00</td>
<td>0.60E-01</td>
<td>0.00</td>
<td>6.39E-01</td>
</tr>
<tr>
<td>0</td>
<td>0.00E+00</td>
<td>0.00</td>
<td>0.00E+00</td>
<td>0.00</td>
<td>3.89E-01</td>
</tr>
</tbody>
</table>
### TULLAHOMA 32 PERCENT MERCURY

**FLUCTUATING PRESSURE TEST**

---

**CONFIG.** MA-2 | **MACH NC.** = 1.0 **TAPE NO.** = 2.0 **PART NC.** = 4.3 **J** = 8 **I** = 9

**MODEL** FREQ., S.F. = 8.81 **PROTOTYPE FREQ.**, S.F. = 7.62 **REDUCED FREQ.**, S.F. = 1.00

---

#### SPECTRAL DATA

- **α = 0°, β = 0°**

---

<table>
<thead>
<tr>
<th>Model</th>
<th>Prototype Reduced S.F.</th>
<th>Xsij(F) S.F.</th>
<th>XsI(F) NCIj(F) NCIj(F) Mod.</th>
<th>Phase of Coher.</th>
<th>Coher.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>0.0</td>
<td>2.31E-03</td>
<td>4.11E-03</td>
<td>0.16</td>
<td>-0.16</td>
</tr>
<tr>
<td>28.57</td>
<td>8.51</td>
<td>0.05</td>
<td>4.76E-03</td>
<td>0.11</td>
<td>0.02</td>
</tr>
<tr>
<td>57.14</td>
<td>17.02</td>
<td>9.10</td>
<td>5.42E-03</td>
<td>0.09</td>
<td>0.22</td>
</tr>
<tr>
<td>85.71</td>
<td>25.53</td>
<td>1.14</td>
<td>4.39E-03</td>
<td>0.11</td>
<td>0.37</td>
</tr>
<tr>
<td>114.29</td>
<td>34.03</td>
<td>1.19</td>
<td>4.52E-03</td>
<td>0.09</td>
<td>0.34</td>
</tr>
<tr>
<td>142.86</td>
<td>42.54</td>
<td>0.24</td>
<td>4.77E-03</td>
<td>0.05</td>
<td>0.32</td>
</tr>
<tr>
<td>171.43</td>
<td>51.05</td>
<td>0.25</td>
<td>5.14E-03</td>
<td>-0.00</td>
<td>0.41</td>
</tr>
<tr>
<td>200.00</td>
<td>59.56</td>
<td>0.34</td>
<td>5.51E-03</td>
<td>-0.09</td>
<td>0.45</td>
</tr>
<tr>
<td>228.57</td>
<td>68.07</td>
<td>0.39</td>
<td>6.14E-03</td>
<td>-0.24</td>
<td>0.44</td>
</tr>
<tr>
<td>257.14</td>
<td>76.58</td>
<td>0.43</td>
<td>6.63E-03</td>
<td>-0.36</td>
<td>0.47</td>
</tr>
<tr>
<td>285.71</td>
<td>85.06</td>
<td>0.48</td>
<td>6.61E-03</td>
<td>-0.39</td>
<td>0.43</td>
</tr>
<tr>
<td>314.29</td>
<td>93.59</td>
<td>0.53</td>
<td>6.43E-03</td>
<td>-0.39</td>
<td>0.34</td>
</tr>
<tr>
<td>342.86</td>
<td>102.10</td>
<td>0.58</td>
<td>6.45E-03</td>
<td>-0.43</td>
<td>0.26</td>
</tr>
<tr>
<td>371.43</td>
<td>110.61</td>
<td>0.63</td>
<td>6.32E-03</td>
<td>-0.49</td>
<td>0.15</td>
</tr>
<tr>
<td>400.00</td>
<td>119.12</td>
<td>0.68</td>
<td>6.00E-03</td>
<td>-0.47</td>
<td>0.11</td>
</tr>
<tr>
<td>428.57</td>
<td>127.63</td>
<td>0.72</td>
<td>5.12E-03</td>
<td>-0.47</td>
<td>0.11</td>
</tr>
<tr>
<td>457.14</td>
<td>136.14</td>
<td>0.77</td>
<td>4.70E-03</td>
<td>-0.46</td>
<td>0.03</td>
</tr>
<tr>
<td>485.71</td>
<td>144.65</td>
<td>0.82</td>
<td>4.47E-03</td>
<td>-0.42</td>
<td>0.02</td>
</tr>
<tr>
<td>514.29</td>
<td>153.15</td>
<td>0.87</td>
<td>4.19E-03</td>
<td>-0.39</td>
<td>0.00</td>
</tr>
<tr>
<td>542.86</td>
<td>161.66</td>
<td>0.92</td>
<td>4.26E-03</td>
<td>-0.36</td>
<td>0.03</td>
</tr>
<tr>
<td>571.43</td>
<td>170.17</td>
<td>0.97</td>
<td>4.33E-03</td>
<td>-0.31</td>
<td>0.12</td>
</tr>
<tr>
<td>600.00</td>
<td>178.68</td>
<td>1.01</td>
<td>4.11E-03</td>
<td>-0.26</td>
<td>0.19</td>
</tr>
<tr>
<td>628.57</td>
<td>187.19</td>
<td>1.06</td>
<td>4.10E-03</td>
<td>-0.23</td>
<td>0.17</td>
</tr>
<tr>
<td>657.14</td>
<td>195.70</td>
<td>1.11</td>
<td>4.12E-03</td>
<td>-0.20</td>
<td>0.18</td>
</tr>
<tr>
<td>685.71</td>
<td>204.21</td>
<td>1.16</td>
<td>4.02E-03</td>
<td>-0.20</td>
<td>0.24</td>
</tr>
<tr>
<td>714.29</td>
<td>212.71</td>
<td>1.21</td>
<td>4.85E-03</td>
<td>-0.21</td>
<td>0.28</td>
</tr>
<tr>
<td>742.86</td>
<td>221.22</td>
<td>1.26</td>
<td>3.57E-03</td>
<td>-0.18</td>
<td>0.28</td>
</tr>
<tr>
<td>771.43</td>
<td>229.73</td>
<td>1.30</td>
<td>3.50E-03</td>
<td>-0.18</td>
<td>0.28</td>
</tr>
<tr>
<td>800.00</td>
<td>238.24</td>
<td>1.35</td>
<td>3.42E-03</td>
<td>-0.04</td>
<td>0.24</td>
</tr>
<tr>
<td>828.57</td>
<td>246.75</td>
<td>1.40</td>
<td>3.29E-03</td>
<td>-0.03</td>
<td>0.18</td>
</tr>
<tr>
<td>857.14</td>
<td>255.26</td>
<td>1.45</td>
<td>3.27E-03</td>
<td>-0.04</td>
<td>0.22</td>
</tr>
<tr>
<td>885.71</td>
<td>263.77</td>
<td>1.50</td>
<td>3.32E-03</td>
<td>-0.04</td>
<td>0.28</td>
</tr>
<tr>
<td>914.29</td>
<td>272.27</td>
<td>1.55</td>
<td>3.11E-03</td>
<td>-0.03</td>
<td>0.23</td>
</tr>
<tr>
<td>942.86</td>
<td>280.78</td>
<td>1.59</td>
<td>2.96E-03</td>
<td>-0.02</td>
<td>0.18</td>
</tr>
<tr>
<td>971.43</td>
<td>289.29</td>
<td>1.64</td>
<td>2.43E-03</td>
<td>-0.02</td>
<td>0.20</td>
</tr>
<tr>
<td>1000.00</td>
<td>297.80</td>
<td>1.69</td>
<td>2.56E-03</td>
<td>0.00</td>
<td>0.17</td>
</tr>
<tr>
<td>TAUI(MSEC)</td>
<td>NRJJ(TAUI)</td>
<td>NRJ(JAU)</td>
<td>+TAI,C(MSEC)</td>
<td>ARJ(J+TAU,C)</td>
<td>-TAU,C(MSEC)</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>----------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>70 1.75E C1</td>
<td>-0.01</td>
<td>0.00</td>
<td>1.71E C1</td>
<td>-0.01</td>
<td>1.79E 01</td>
</tr>
<tr>
<td>69 1.72E 01</td>
<td>-0.01</td>
<td>0.01</td>
<td>1.68E 01</td>
<td>-0.02</td>
<td>1.77E 01</td>
</tr>
<tr>
<td>68 1.72E 01</td>
<td>-0.02</td>
<td>0.02</td>
<td>1.66E 01</td>
<td>-0.01</td>
<td>1.74E 01</td>
</tr>
<tr>
<td>67 1.67E 01</td>
<td>-0.01</td>
<td>0.02</td>
<td>1.63E 01</td>
<td>-0.00</td>
<td>1.72E 01</td>
</tr>
<tr>
<td>66 1.65E 01</td>
<td>0.00</td>
<td>0.02</td>
<td>1.61E 01</td>
<td>0.01</td>
<td>1.69E 01</td>
</tr>
<tr>
<td>65 1.62E 01</td>
<td>0.01</td>
<td>0.02</td>
<td>1.58E 01</td>
<td>0.02</td>
<td>1.67E 01</td>
</tr>
<tr>
<td>64 1.66E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.56E 01</td>
<td>0.01</td>
<td>1.64E 01</td>
</tr>
<tr>
<td>63 1.57E 01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>1.53E 01</td>
<td>0.00</td>
<td>1.62E 01</td>
</tr>
<tr>
<td>62 1.55E 01</td>
<td>-0.01</td>
<td>-0.02</td>
<td>1.51E 01</td>
<td>0.00</td>
<td>1.59E 01</td>
</tr>
<tr>
<td>61 1.52E 01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>1.48E 01</td>
<td>0.00</td>
<td>1.57E 01</td>
</tr>
<tr>
<td>60 1.50E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.48E 01</td>
<td>0.02</td>
<td>1.55E 01</td>
</tr>
<tr>
<td>59 1.47E 01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.43E 01</td>
<td>0.02</td>
<td>1.52E 01</td>
</tr>
<tr>
<td>58 1.45E 01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.41E 01</td>
<td>0.01</td>
<td>1.49E 01</td>
</tr>
<tr>
<td>57 1.42E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.36E 01</td>
<td>0.01</td>
<td>1.44E 01</td>
</tr>
<tr>
<td>56 1.42E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.36E 01</td>
<td>0.01</td>
<td>1.44E 01</td>
</tr>
<tr>
<td>55 1.37E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.34E 01</td>
<td>0.01</td>
<td>1.42E 01</td>
</tr>
<tr>
<td>54 1.35E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.31E 01</td>
<td>0.00</td>
<td>1.39E 01</td>
</tr>
<tr>
<td>53 1.32E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.28E 01</td>
<td>0.00</td>
<td>1.37E 01</td>
</tr>
<tr>
<td>52 1.30E 01</td>
<td>0.00</td>
<td>0.00</td>
<td>1.26E 01</td>
<td>0.01</td>
<td>1.34E 01</td>
</tr>
<tr>
<td>51 1.27E 01</td>
<td>-0.01</td>
<td>-0.00</td>
<td>1.23E 01</td>
<td>0.00</td>
<td>1.32E 01</td>
</tr>
<tr>
<td>50 1.25E 01</td>
<td>-0.01</td>
<td>-0.00</td>
<td>1.21E 01</td>
<td>0.00</td>
<td>1.29E 01</td>
</tr>
<tr>
<td>49 1.22E 01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.18E 01</td>
<td>-0.01</td>
<td>1.27E 01</td>
</tr>
<tr>
<td>48 1.20E 01</td>
<td>0.00</td>
<td>0.01</td>
<td>1.16E 01</td>
<td>-0.01</td>
<td>1.24E 01</td>
</tr>
<tr>
<td>47 1.17E 01</td>
<td>-0.00</td>
<td>0.00</td>
<td>1.13E 01</td>
<td>-0.01</td>
<td>1.22E 01</td>
</tr>
<tr>
<td>46 1.15E 01</td>
<td>-0.01</td>
<td>-0.00</td>
<td>1.11E 01</td>
<td>-0.00</td>
<td>1.19E 01</td>
</tr>
<tr>
<td>45 1.12E 01</td>
<td>0.02</td>
<td>0.00</td>
<td>1.08E 01</td>
<td>-0.01</td>
<td>1.17E 01</td>
</tr>
<tr>
<td>44 1.10E 01</td>
<td>0.02</td>
<td>0.02</td>
<td>1.06E 01</td>
<td>0.00</td>
<td>1.14E 01</td>
</tr>
<tr>
<td>43 1.07E 01</td>
<td>0.02</td>
<td>0.02</td>
<td>1.03E 01</td>
<td>0.01</td>
<td>1.12E 01</td>
</tr>
<tr>
<td>42 1.05E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.01E 01</td>
<td>0.01</td>
<td>1.09E 01</td>
</tr>
<tr>
<td>41 1.02E 01</td>
<td>0.01</td>
<td>0.01</td>
<td>1.01E 01</td>
<td>0.01</td>
<td>1.09E 01</td>
</tr>
<tr>
<td>40 1.00E 00</td>
<td>0.00</td>
<td>0.00</td>
<td>9.82E 00</td>
<td>0.00</td>
<td>1.07E 01</td>
</tr>
<tr>
<td>39 9.75E 00</td>
<td>-0.02</td>
<td>0.01</td>
<td>9.82E 00</td>
<td>0.00</td>
<td>1.07E 01</td>
</tr>
<tr>
<td>38 9.55E 00</td>
<td>0.01</td>
<td>0.02</td>
<td>8.74E 00</td>
<td>0.00</td>
<td>9.93E 00</td>
</tr>
<tr>
<td>37 9.25E 00</td>
<td>0.02</td>
<td>0.03</td>
<td>8.74E 00</td>
<td>0.02</td>
<td>9.68E 00</td>
</tr>
<tr>
<td>36 9.05E 00</td>
<td>0.02</td>
<td>0.03</td>
<td>8.74E 00</td>
<td>0.00</td>
<td>9.43E 00</td>
</tr>
<tr>
<td>35 8.75E 00</td>
<td>0.03</td>
<td>0.03</td>
<td>8.74E 00</td>
<td>0.00</td>
<td>9.18E 00</td>
</tr>
<tr>
<td>34 8.55E 00</td>
<td>0.03</td>
<td>0.01</td>
<td>8.74E 00</td>
<td>0.01</td>
<td>8.93E 00</td>
</tr>
</tbody>
</table>
### TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST

#### CONFIG. MA-2

<table>
<thead>
<tr>
<th>L TAU (MSEC)</th>
<th>NRJ (TAU)</th>
<th>NRII (TAU)</th>
<th>+TAU, C (MSEC)</th>
<th>NRII (+TAU, C)</th>
<th>-TAU, C (MSEC)</th>
<th>NRII (-TAU, C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 8.25E-00</td>
<td>0.02</td>
<td>-0.00</td>
<td>7.82E-00</td>
<td>0.01</td>
<td>8.68E-00</td>
<td>-0.04</td>
</tr>
<tr>
<td>31 7.75E-00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>7.57E-00</td>
<td>0.02</td>
<td>8.43E-00</td>
<td>-0.03</td>
</tr>
<tr>
<td>30 7.50E-00</td>
<td>-0.02</td>
<td>0.00</td>
<td>7.07E-00</td>
<td>-0.00</td>
<td>7.93E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>29 7.25E-00</td>
<td>-0.02</td>
<td>0.00</td>
<td>6.82E-00</td>
<td>-0.02</td>
<td>7.68E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>28 7.00E-00</td>
<td>-0.01</td>
<td>0.00</td>
<td>6.57E-00</td>
<td>-0.03</td>
<td>7.43E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>27 6.75E-00</td>
<td>0.00</td>
<td>0.01</td>
<td>6.32E-00</td>
<td>-0.02</td>
<td>7.18E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>26 6.50E-00</td>
<td>0.02</td>
<td>0.00</td>
<td>6.07E-00</td>
<td>-0.01</td>
<td>6.93E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>25 6.25E-00</td>
<td>0.02</td>
<td>0.00</td>
<td>5.82E-00</td>
<td>-0.01</td>
<td>6.68E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>24 6.00E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>5.57E-00</td>
<td>0.02</td>
<td>6.43E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>23 5.75E-00</td>
<td>0.02</td>
<td>-0.02</td>
<td>5.32E-00</td>
<td>0.02</td>
<td>6.18E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>22 5.50E-00</td>
<td>0.02</td>
<td>-0.03</td>
<td>5.07E-00</td>
<td>0.02</td>
<td>5.93E-00</td>
<td>0.02</td>
</tr>
<tr>
<td>21 5.25E-00</td>
<td>0.02</td>
<td>-0.03</td>
<td>4.82E-00</td>
<td>0.01</td>
<td>5.68E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>20 5.00E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>4.57E-00</td>
<td>0.00</td>
<td>5.43E-00</td>
<td>0.00</td>
</tr>
<tr>
<td>19 4.75E-00</td>
<td>0.01</td>
<td>0.00</td>
<td>4.32E-00</td>
<td>-0.00</td>
<td>5.18E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>18 4.50E-00</td>
<td>0.02</td>
<td>0.01</td>
<td>4.07E-00</td>
<td>-0.01</td>
<td>4.93E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>17 4.25E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>3.82E-00</td>
<td>-0.00</td>
<td>4.68E-00</td>
<td>0.00</td>
</tr>
<tr>
<td>16 4.00E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>3.57E-00</td>
<td>-0.00</td>
<td>4.43E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>15 3.75E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>3.32E-00</td>
<td>-0.00</td>
<td>4.18E-00</td>
<td>0.03</td>
</tr>
<tr>
<td>14 3.50E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>3.07E-00</td>
<td>-0.00</td>
<td>3.93E-00</td>
<td>0.03</td>
</tr>
<tr>
<td>13 3.25E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>2.82E-00</td>
<td>-0.01</td>
<td>3.68E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>12 3.00E-00</td>
<td>0.02</td>
<td>0.00</td>
<td>2.57E-00</td>
<td>-0.00</td>
<td>3.43E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>11 2.75E-00</td>
<td>0.02</td>
<td>0.00</td>
<td>2.32E-00</td>
<td>0.01</td>
<td>3.18E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>10 2.50E-00</td>
<td>0.02</td>
<td>0.00</td>
<td>2.07E-00</td>
<td>0.01</td>
<td>2.93E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>9 2.25E-00</td>
<td>0.01</td>
<td>0.00</td>
<td>1.82E-00</td>
<td>0.01</td>
<td>2.68E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>8 2.00E-00</td>
<td>0.02</td>
<td>-0.01</td>
<td>1.57E-00</td>
<td>0.02</td>
<td>2.43E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>7 1.75E-00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>1.32E-00</td>
<td>0.02</td>
<td>2.18E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>6 1.50E-00</td>
<td>-0.01</td>
<td>0.00</td>
<td>1.07E-00</td>
<td>0.02</td>
<td>1.93E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>5 1.25E-00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>8.22E-02</td>
<td>0.02</td>
<td>1.68E-00</td>
<td>0.01</td>
</tr>
<tr>
<td>4 1.00E-00</td>
<td>-0.22</td>
<td>-0.03</td>
<td>5.72E-02</td>
<td>-0.19</td>
<td>1.43E-00</td>
<td>0.03</td>
</tr>
<tr>
<td>3 7.50E-01</td>
<td>-0.16</td>
<td>-0.03</td>
<td>3.22E-01</td>
<td>-0.45</td>
<td>1.18E-00</td>
<td>0.03</td>
</tr>
<tr>
<td>2 5.00E-01</td>
<td>0.12</td>
<td>0.17</td>
<td>7.20E-02</td>
<td>-0.46</td>
<td>1.28E-00</td>
<td>0.13</td>
</tr>
<tr>
<td>1 2.50E-01</td>
<td>0.67</td>
<td>0.67</td>
<td>-1.76E-01</td>
<td>-0.22</td>
<td>5.78E-01</td>
<td>0.12</td>
</tr>
<tr>
<td>0 1.00</td>
<td>1.00</td>
<td>-4.28E-01</td>
<td>0.02</td>
<td>4.28E-01</td>
<td>0.02</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Numbers are in scientific notation.
### Spectral Data

**Tullahoma 32 Percent Mercury Fluctuating Pressure Test**

\( \alpha = 0^\circ, \beta = 0^\circ \)

**Configuration:** MA-2  |  **Mach No.:** 1.2  |  **Tape No.:** 2.0  |  **Part No.:** 5.3  |  **J = 6**  |  **I = 7**  |  **Prototype Freq., S.F. = 25.20**  |  **Prototype Freq., S.F. = 6.71 Reduced Freq., S.F. = 1.00**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Prototype Reduced S.F. X SJJ(F)</th>
<th>Prototype Reduced S.F. X SII(F)</th>
<th>Prototype Reduced S.F. X NJJ(F)</th>
<th>Prototype Reduced S.F. X NJI(F)</th>
<th>Prototype Reduced S.F. X NCIJ(F)</th>
<th>Prototype Reduced S.F. X NCIJ(F)</th>
<th>Prototype Reduced S.F. X M○D.(F)</th>
<th>Prototype Reduced S.F. X PHASE OF COHER.</th>
<th>Prototype Reduced S.F. X COHER.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>121.84</td>
<td>0.58</td>
<td>3.52E-C2</td>
<td>1.55E-03</td>
<td>0.51</td>
<td>0.19</td>
<td>0.54</td>
<td>0.56</td>
<td>159.04</td>
</tr>
<tr>
<td>28.57</td>
<td>130.54</td>
<td>0.63</td>
<td>3.56E-C2</td>
<td>1.11E-03</td>
<td>0.53</td>
<td>0.18</td>
<td>0.56</td>
<td>0.59</td>
<td>159.04</td>
</tr>
<tr>
<td>65.71</td>
<td>139.25</td>
<td>0.67</td>
<td>3.75E-C2</td>
<td>1.08E-03</td>
<td>0.55</td>
<td>0.22</td>
<td>0.60</td>
<td>0.66</td>
<td>201.82</td>
</tr>
<tr>
<td>43.71</td>
<td>147.55</td>
<td>0.71</td>
<td>3.44E-C2</td>
<td>9.80E-04</td>
<td>0.53</td>
<td>0.26</td>
<td>0.69</td>
<td>0.76</td>
<td>206.25</td>
</tr>
<tr>
<td>114</td>
<td>156.65</td>
<td>0.75</td>
<td>3.02E-02</td>
<td>8.01E-04</td>
<td>0.48</td>
<td>0.31</td>
<td>0.86</td>
<td>0.91</td>
<td>212.56</td>
</tr>
<tr>
<td>314.56</td>
<td>165.35</td>
<td>0.85</td>
<td>3.54E-C2</td>
<td>8.42E-04</td>
<td>0.47</td>
<td>0.35</td>
<td>0.91</td>
<td>0.96</td>
<td>216.55</td>
</tr>
<tr>
<td>400.00</td>
<td>174.24</td>
<td>0.83</td>
<td>2.97E-02</td>
<td>8.51E-04</td>
<td>0.51</td>
<td>0.33</td>
<td>0.91</td>
<td>0.96</td>
<td>218.23</td>
</tr>
<tr>
<td>342.61</td>
<td>182.76</td>
<td>0.88</td>
<td>2.51E-C2</td>
<td>8.09E-04</td>
<td>0.52</td>
<td>0.28</td>
<td>0.90</td>
<td>0.96</td>
<td>218.23</td>
</tr>
<tr>
<td>628.57</td>
<td>191.46</td>
<td>0.92</td>
<td>2.23E-C2</td>
<td>7.84E-04</td>
<td>0.47</td>
<td>0.28</td>
<td>0.90</td>
<td>0.96</td>
<td>218.23</td>
</tr>
<tr>
<td>400.00</td>
<td>198.47</td>
<td>1.00</td>
<td>1.87E-C2</td>
<td>7.15E-04</td>
<td>0.43</td>
<td>0.36</td>
<td>0.91</td>
<td>0.96</td>
<td>220.09</td>
</tr>
<tr>
<td>571.43</td>
<td>205.60</td>
<td>1.04</td>
<td>1.68E-02</td>
<td>6.09E-04</td>
<td>0.35</td>
<td>0.38</td>
<td>0.91</td>
<td>0.96</td>
<td>227.95</td>
</tr>
<tr>
<td>914.29</td>
<td>212.57</td>
<td>1.08</td>
<td>1.46E-02</td>
<td>5.73E-04</td>
<td>0.32</td>
<td>0.44</td>
<td>0.95</td>
<td>0.96</td>
<td>233.91</td>
</tr>
<tr>
<td>800.00</td>
<td>219.48</td>
<td>1.13</td>
<td>1.46E-02</td>
<td>4.89E-04</td>
<td>0.33</td>
<td>0.46</td>
<td>0.96</td>
<td>0.96</td>
<td>234.26</td>
</tr>
<tr>
<td>828.57</td>
<td>226.38</td>
<td>1.17</td>
<td>1.30E-02</td>
<td>5.72E-04</td>
<td>0.25</td>
<td>0.44</td>
<td>0.95</td>
<td>0.96</td>
<td>240.48</td>
</tr>
<tr>
<td>857.14</td>
<td>233.29</td>
<td>1.21</td>
<td>1.14E-02</td>
<td>4.84E-04</td>
<td>0.21</td>
<td>0.46</td>
<td>0.95</td>
<td>0.96</td>
<td>245.37</td>
</tr>
<tr>
<td>885.71</td>
<td>240.19</td>
<td>1.25</td>
<td>9.88E-03</td>
<td>4.20E-04</td>
<td>0.25</td>
<td>0.45</td>
<td>0.95</td>
<td>0.96</td>
<td>237.79</td>
</tr>
<tr>
<td>914.29</td>
<td>247.09</td>
<td>1.33</td>
<td>8.09E-03</td>
<td>3.76E-04</td>
<td>0.21</td>
<td>0.41</td>
<td>0.96</td>
<td>0.96</td>
<td>242.93</td>
</tr>
<tr>
<td>942.86</td>
<td>254.00</td>
<td>1.38</td>
<td>7.42E-03</td>
<td>3.13E-04</td>
<td>0.11</td>
<td>0.34</td>
<td>0.96</td>
<td>0.96</td>
<td>252.10</td>
</tr>
<tr>
<td>971.43</td>
<td>260.90</td>
<td>1.42</td>
<td>6.75E-03</td>
<td>2.75E-04</td>
<td>0.00</td>
<td>0.26</td>
<td>0.96</td>
<td>0.96</td>
<td>268.94</td>
</tr>
<tr>
<td>1000.00</td>
<td>267.80</td>
<td>1.46</td>
<td>6.07E-03</td>
<td>2.66E-04</td>
<td>0.00</td>
<td>0.31</td>
<td>0.96</td>
<td>0.96</td>
<td>269.56</td>
</tr>
</tbody>
</table>
**TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST**

<table>
<thead>
<tr>
<th>TAU(MSEC)</th>
<th>NRJJ(TAU)</th>
<th>NRJJ(TAU) +TAU*C(MSEC)</th>
<th>NRJJ(TAU)+TAU*C</th>
<th>-TAU+C(MSEC)</th>
<th>NRJJ(TAU)-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>7C 1.75E C1</td>
<td>0.00</td>
<td>0.01 1.71E C1</td>
<td>0.01</td>
<td>1.79E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>69 1.72E C1</td>
<td>-0.02</td>
<td>0.01 1.68E C1</td>
<td>0.01</td>
<td>1.77E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>68 1.70E C1</td>
<td>-0.02</td>
<td>0.01 1.66E C1</td>
<td>0.01</td>
<td>1.74E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>67 1.67E C1</td>
<td>-0.01</td>
<td>-0.00 1.63E C1</td>
<td>0.00</td>
<td>1.72E C1</td>
<td>-0.00</td>
</tr>
<tr>
<td>66 1.65E C1</td>
<td>-0.00</td>
<td>-0.02 1.61E C1</td>
<td>-0.01</td>
<td>1.69E C1</td>
<td>-0.00</td>
</tr>
<tr>
<td>65 1.62E C1</td>
<td>0.01</td>
<td>-0.01 1.58E C1</td>
<td>-0.01</td>
<td>1.66E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>64 1.60E C1</td>
<td>0.01</td>
<td>0.00 1.56E C1</td>
<td>0.01</td>
<td>1.63E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>63 1.57E C1</td>
<td>0.00</td>
<td>0.00 1.53E C1</td>
<td>-0.02</td>
<td>1.62E C1</td>
<td>0.00</td>
</tr>
<tr>
<td>62 1.55E C1</td>
<td>0.00</td>
<td>-0.01 1.51E C1</td>
<td>-0.02</td>
<td>1.59E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>61 1.52E C1</td>
<td>-0.00</td>
<td>-0.01 1.49E C1</td>
<td>-0.01</td>
<td>1.57E C1</td>
<td>-0.02</td>
</tr>
<tr>
<td>60 1.50E C1</td>
<td>-0.01</td>
<td>-0.01 1.46E C1</td>
<td>-0.00</td>
<td>1.55E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>59 1.47E C1</td>
<td>-0.01</td>
<td>0.02 1.43E C1</td>
<td>-0.01</td>
<td>1.53E C1</td>
<td>0.00</td>
</tr>
<tr>
<td>58 1.45E C1</td>
<td>-0.01</td>
<td>0.01 1.41E C1</td>
<td>-0.01</td>
<td>1.49E C1</td>
<td>-0.00</td>
</tr>
<tr>
<td>57 1.42E C1</td>
<td>-0.00</td>
<td>-0.00 1.38E C1</td>
<td>0.00</td>
<td>1.47E C1</td>
<td>-0.00</td>
</tr>
<tr>
<td>56 1.40E C1</td>
<td>-0.01</td>
<td>-0.02 1.36E C1</td>
<td>0.01</td>
<td>1.44E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>55 1.37E C1</td>
<td>-0.00</td>
<td>-0.02 1.33E C1</td>
<td>0.01</td>
<td>1.42E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>54 1.35E C1</td>
<td>0.00</td>
<td>0.01 1.31E C1</td>
<td>0.01</td>
<td>1.39E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>53 1.32E C1</td>
<td>0.00</td>
<td>0.01 1.28E C1</td>
<td>0.01</td>
<td>1.37E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>52 1.30E C1</td>
<td>0.00</td>
<td>-0.00 1.26E C1</td>
<td>0.02</td>
<td>1.34E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>51 1.27E C1</td>
<td>-0.00</td>
<td>0.00 1.23E C1</td>
<td>0.01</td>
<td>1.32E C1</td>
<td>-0.02</td>
</tr>
<tr>
<td>50 1.25E C1</td>
<td>-0.01</td>
<td>0.00 1.21E C1</td>
<td>-0.00</td>
<td>1.29E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>49 1.22E C1</td>
<td>0.01</td>
<td>0.01 1.18E C1</td>
<td>-0.01</td>
<td>1.27E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>48 1.20E C1</td>
<td>0.00</td>
<td>0.00 1.16E C1</td>
<td>-0.01</td>
<td>1.24E C1</td>
<td>0.00</td>
</tr>
<tr>
<td>47 1.17E C1</td>
<td>-0.01</td>
<td>-0.01 1.13E C1</td>
<td>-0.01</td>
<td>1.22E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>46 1.15E C1</td>
<td>-0.01</td>
<td>0.01 1.11E C1</td>
<td>-0.01</td>
<td>1.19E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>45 1.12E C1</td>
<td>-0.00</td>
<td>0.02 1.08E C1</td>
<td>-0.02</td>
<td>1.17E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>44 1.10E C1</td>
<td>0.01</td>
<td>0.01 1.06E C1</td>
<td>-0.02</td>
<td>1.15E C1</td>
<td>-0.00</td>
</tr>
<tr>
<td>43 1.07E C1</td>
<td>0.02</td>
<td>0.01 1.03E C1</td>
<td>-0.01</td>
<td>1.12E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>42 1.05E C1</td>
<td>0.02</td>
<td>0.01 1.01E C1</td>
<td>0.00</td>
<td>1.09E C1</td>
<td>-0.03</td>
</tr>
<tr>
<td>41 1.02E C1</td>
<td>-0.01</td>
<td>-0.01 9.83E 00</td>
<td>0.02</td>
<td>1.07E C1</td>
<td>-0.03</td>
</tr>
<tr>
<td>40 1.00E C0</td>
<td>-0.03</td>
<td>-0.01 9.58E 00</td>
<td>0.02</td>
<td>1.04E C1</td>
<td>-0.01</td>
</tr>
<tr>
<td>39 9.75E C0</td>
<td>-0.02</td>
<td>-0.01 9.33E 00</td>
<td>0.00</td>
<td>1.02E C1</td>
<td>0.01</td>
</tr>
<tr>
<td>38 9.50E C0</td>
<td>-0.02</td>
<td>-0.01 9.08E 00</td>
<td>-0.01</td>
<td>9.92E 00</td>
<td>0.02</td>
</tr>
<tr>
<td>37 9.25E C0</td>
<td>0.00</td>
<td>0.02 8.83E C0</td>
<td>0.00</td>
<td>9.67E 00</td>
<td>0.03</td>
</tr>
<tr>
<td>36 9.00E C0</td>
<td>0.02</td>
<td>0.03 8.58E 00</td>
<td>0.02</td>
<td>9.42E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>35 8.75E C0</td>
<td>0.03</td>
<td>-0.00 8.33E C0</td>
<td>0.02</td>
<td>9.17E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>34 8.50E C0</td>
<td>0.03</td>
<td>-0.00 8.08E 00</td>
<td>0.01</td>
<td>8.92E 00</td>
<td>-0.02</td>
</tr>
</tbody>
</table>
### TULLAHOMA 32 PERCENT MERCURY

**FLUCTUATING PRESSURE TEST**

**α = 0°, β = 0°**

**CONFIG. MA-2**

**MACH NO. = 1.2**

**TAPE NO. = 2.0**

**PART NO. = 5.3**

**J = 6**

**I = 9**

**RJ1(0) = 9.5283E-01**

**RII(0) = 3.3165E-02**

<table>
<thead>
<tr>
<th>L TAU(MSEC)</th>
<th>NRJ(J(TAU))</th>
<th>NRII(TAU)</th>
<th>+TAU,C(MSEC)</th>
<th>NRIJ(+TAU,C)</th>
<th>-TAU,C(MSEC)</th>
<th>NRIJ(−TAU,C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 8.75E CC</td>
<td>0.02</td>
<td>-0.00</td>
<td>7.83E 00</td>
<td>-0.00</td>
<td>8.67E 00</td>
<td>-0.02</td>
</tr>
<tr>
<td>32 7.75E CC</td>
<td>0.01</td>
<td>-0.00</td>
<td>7.58E 00</td>
<td>-0.02</td>
<td>8.42E 00</td>
<td>-0.01</td>
</tr>
<tr>
<td>31 6.75E CC</td>
<td>0.00</td>
<td>0.02</td>
<td>7.83E 00</td>
<td>-0.03</td>
<td>8.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>30 7.55E CC</td>
<td>-0.01</td>
<td>0.03</td>
<td>7.68E 00</td>
<td>-0.02</td>
<td>7.92E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>29 7.25E CC</td>
<td>-0.01</td>
<td>0.00</td>
<td>6.83E 00</td>
<td>-0.01</td>
<td>7.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>28 7.25E CC</td>
<td>-0.01</td>
<td>0.00</td>
<td>6.58E 00</td>
<td>-0.00</td>
<td>7.42E 00</td>
<td>0.01</td>
</tr>
<tr>
<td>27 6.75E CC</td>
<td>0.00</td>
<td>0.01</td>
<td>6.33E 00</td>
<td>-0.01</td>
<td>7.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>26 6.75E CC</td>
<td>0.01</td>
<td>-0.01</td>
<td>6.08E 00</td>
<td>-0.01</td>
<td>6.92E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>25 6.25E CC</td>
<td>0.01</td>
<td>-0.01</td>
<td>5.83E 00</td>
<td>0.00</td>
<td>6.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>24 6.05E CC</td>
<td>0.00</td>
<td>0.00</td>
<td>5.75E 00</td>
<td>0.00</td>
<td>6.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>23 6.05E CC</td>
<td>0.00</td>
<td>0.00</td>
<td>5.68E 00</td>
<td>0.00</td>
<td>6.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>22 6.05E CC</td>
<td>0.00</td>
<td>0.00</td>
<td>5.68E 00</td>
<td>0.00</td>
<td>6.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>21 5.55E CC</td>
<td>0.02</td>
<td>-0.00</td>
<td>5.83E 00</td>
<td>0.00</td>
<td>6.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>20 5.75E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>5.75E 00</td>
<td>0.00</td>
<td>6.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>19 4.75E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>4.83E 00</td>
<td>0.00</td>
<td>5.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>18 4.55E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>4.75E 00</td>
<td>0.00</td>
<td>5.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>17 4.25E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>4.25E 00</td>
<td>0.00</td>
<td>4.92E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>16 4.05E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>3.83E 00</td>
<td>0.00</td>
<td>4.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>15 3.75E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>3.75E 00</td>
<td>0.00</td>
<td>4.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>14 3.55E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>3.55E 00</td>
<td>0.00</td>
<td>4.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>13 3.55E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>3.55E 00</td>
<td>0.00</td>
<td>4.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>12 3.35E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>3.25E 00</td>
<td>0.00</td>
<td>3.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>11 2.75E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>2.83E 00</td>
<td>0.00</td>
<td>3.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>10 2.25E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>2.08E 00</td>
<td>0.00</td>
<td>2.92E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>9 2.05E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>1.83E 00</td>
<td>0.00</td>
<td>2.67E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>8 2.05E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>1.55E 00</td>
<td>0.00</td>
<td>2.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>7 1.75E CC</td>
<td>0.01</td>
<td>0.00</td>
<td>1.33E 00</td>
<td>0.00</td>
<td>2.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>6 1.55E CC</td>
<td>-0.01</td>
<td>0.05</td>
<td>1.08E 00</td>
<td>0.14</td>
<td>1.92E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>5 1.55E CC</td>
<td>-0.01</td>
<td>0.05</td>
<td>1.08E 00</td>
<td>0.14</td>
<td>1.92E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>4 10.00E-01</td>
<td>-0.23</td>
<td>0.03</td>
<td>5.78E-01</td>
<td>0.05</td>
<td>1.42E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>3 7.50E-01</td>
<td>-0.10</td>
<td>0.01</td>
<td>3.28E-01</td>
<td>0.06</td>
<td>1.17E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>2 5.00E-01</td>
<td>-0.10</td>
<td>0.01</td>
<td>7.60E-01</td>
<td>0.08</td>
<td>9.22E-01</td>
<td>0.00</td>
</tr>
<tr>
<td>1 2.50E-01</td>
<td>0.67</td>
<td>0.37</td>
<td>-1.72E-01</td>
<td>-0.06</td>
<td>6.72E-01</td>
<td>0.00</td>
</tr>
<tr>
<td>0 1.00</td>
<td>-0.04</td>
<td>-4.22E-01</td>
<td>-0.04</td>
<td>4.22E-01</td>
<td>-0.04</td>
<td></td>
</tr>
</tbody>
</table>
### SPECTRAL DATA

**TULLAHOMA 32 PERCENT MERCURY FLUCTUATING PRESSURE TEST**

<table>
<thead>
<tr>
<th>α = 0°, β = 0°</th>
</tr>
</thead>
</table>

**CONFIG. MA-2**

| MACH NC. = 1.2 | TAPE NC. = 2.0 | PART NC. = 5.3 | J = 6 | I = 9 |

**MODEL FREQ.**, S.F. = 25.20

**PROTOTYPE FREQ.**, S.F. = 6.71

**REDUCED FREQ.**, S.F. = 1.00

<table>
<thead>
<tr>
<th>WAVE.</th>
<th>PRACTICE REDUCED S.F.</th>
<th>XS11(F)</th>
<th>XS11(F)</th>
<th>MCW.</th>
<th>CF.</th>
<th>PHASE CF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.17</td>
<td>1.44E-02</td>
<td>6.3E-04</td>
<td>0.12</td>
<td>0.12</td>
<td>180.00</td>
</tr>
<tr>
<td>28.57</td>
<td>8.70</td>
<td>0.04</td>
<td>1.54E-02</td>
<td>6.7E-04</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>57.14</td>
<td>17.41</td>
<td>0.08</td>
<td>2.54E-02</td>
<td>6.6E-04</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>85.71</td>
<td>26.11</td>
<td>0.13</td>
<td>3.54E-02</td>
<td>6.5E-04</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>114.29</td>
<td>34.81</td>
<td>0.17</td>
<td>4.54E-02</td>
<td>6.4E-04</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td>142.86</td>
<td>43.51</td>
<td>0.21</td>
<td>5.54E-02</td>
<td>6.3E-04</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>171.43</td>
<td>53.22</td>
<td>0.25</td>
<td>6.54E-02</td>
<td>6.2E-04</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>200.00</td>
<td>60.92</td>
<td>0.29</td>
<td>7.54E-02</td>
<td>6.1E-04</td>
<td>0.29</td>
<td>0.29</td>
</tr>
<tr>
<td>228.57</td>
<td>69.62</td>
<td>0.33</td>
<td>8.54E-02</td>
<td>6.0E-04</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td>257.14</td>
<td>78.33</td>
<td>0.38</td>
<td>9.54E-02</td>
<td>5.9E-04</td>
<td>0.38</td>
<td>0.38</td>
</tr>
<tr>
<td>285.71</td>
<td>87.03</td>
<td>0.42</td>
<td>1.05E-02</td>
<td>5.8E-04</td>
<td>0.42</td>
<td>0.42</td>
</tr>
<tr>
<td>314.29</td>
<td>95.73</td>
<td>0.46</td>
<td>1.15E-02</td>
<td>5.7E-04</td>
<td>0.46</td>
<td>0.46</td>
</tr>
<tr>
<td>342.86</td>
<td>104.43</td>
<td>0.50</td>
<td>1.25E-02</td>
<td>5.6E-04</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>371.43</td>
<td>113.14</td>
<td>0.54</td>
<td>1.35E-02</td>
<td>5.5E-04</td>
<td>0.54</td>
<td>0.54</td>
</tr>
<tr>
<td>400.00</td>
<td>121.84</td>
<td>0.58</td>
<td>1.45E-02</td>
<td>5.4E-04</td>
<td>0.58</td>
<td>0.58</td>
</tr>
<tr>
<td>428.57</td>
<td>130.54</td>
<td>0.63</td>
<td>1.55E-02</td>
<td>5.3E-04</td>
<td>0.63</td>
<td>0.63</td>
</tr>
<tr>
<td>457.14</td>
<td>139.25</td>
<td>0.67</td>
<td>1.65E-02</td>
<td>5.2E-04</td>
<td>0.67</td>
<td>0.67</td>
</tr>
<tr>
<td>485.71</td>
<td>147.95</td>
<td>0.71</td>
<td>1.75E-02</td>
<td>5.1E-04</td>
<td>0.71</td>
<td>0.71</td>
</tr>
<tr>
<td>514.29</td>
<td>156.65</td>
<td>0.75</td>
<td>1.85E-02</td>
<td>5.0E-04</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>542.86</td>
<td>165.35</td>
<td>0.79</td>
<td>1.95E-02</td>
<td>4.9E-04</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td>571.43</td>
<td>174.06</td>
<td>0.83</td>
<td>2.05E-02</td>
<td>4.8E-04</td>
<td>0.83</td>
<td>0.83</td>
</tr>
<tr>
<td>600.00</td>
<td>182.76</td>
<td>0.88</td>
<td>2.15E-02</td>
<td>4.7E-04</td>
<td>0.88</td>
<td>0.88</td>
</tr>
<tr>
<td>628.57</td>
<td>191.46</td>
<td>0.92</td>
<td>2.25E-02</td>
<td>4.6E-04</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td>657.14</td>
<td>199.71</td>
<td>0.96</td>
<td>2.35E-02</td>
<td>4.5E-04</td>
<td>0.96</td>
<td>0.96</td>
</tr>
<tr>
<td>685.71</td>
<td>208.27</td>
<td>1.00</td>
<td>2.45E-02</td>
<td>4.4E-04</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>714.29</td>
<td>216.77</td>
<td>1.04</td>
<td>2.55E-02</td>
<td>4.3E-04</td>
<td>1.04</td>
<td>1.04</td>
</tr>
<tr>
<td>742.86</td>
<td>225.27</td>
<td>1.08</td>
<td>2.65E-02</td>
<td>4.2E-04</td>
<td>1.08</td>
<td>1.08</td>
</tr>
<tr>
<td>771.43</td>
<td>233.84</td>
<td>1.13</td>
<td>2.75E-02</td>
<td>4.1E-04</td>
<td>1.13</td>
<td>1.13</td>
</tr>
<tr>
<td>800.00</td>
<td>242.38</td>
<td>1.17</td>
<td>2.85E-02</td>
<td>4.0E-04</td>
<td>1.17</td>
<td>1.17</td>
</tr>
<tr>
<td>828.57</td>
<td>250.38</td>
<td>1.21</td>
<td>2.95E-02</td>
<td>3.9E-04</td>
<td>1.21</td>
<td>1.21</td>
</tr>
<tr>
<td>857.14</td>
<td>258.80</td>
<td>1.25</td>
<td>3.05E-02</td>
<td>3.8E-04</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td>885.71</td>
<td>266.75</td>
<td>1.29</td>
<td>3.15E-02</td>
<td>3.7E-04</td>
<td>1.29</td>
<td>1.29</td>
</tr>
<tr>
<td>914.29</td>
<td>274.64</td>
<td>1.33</td>
<td>3.25E-02</td>
<td>3.6E-04</td>
<td>1.33</td>
<td>1.33</td>
</tr>
<tr>
<td>942.86</td>
<td>282.19</td>
<td>1.37</td>
<td>3.35E-02</td>
<td>3.5E-04</td>
<td>1.37</td>
<td>1.37</td>
</tr>
<tr>
<td>971.43</td>
<td>289.57</td>
<td>1.41</td>
<td>3.45E-02</td>
<td>3.4E-04</td>
<td>1.41</td>
<td>1.41</td>
</tr>
<tr>
<td>1000.00</td>
<td>304.60</td>
<td>1.46</td>
<td>3.55E-02</td>
<td>3.3E-04</td>
<td>1.46</td>
<td>1.46</td>
</tr>
</tbody>
</table>

**MODEL SPECTRAL DATA**
### Tullahoma 32 Percent Mercury Fluctuating Pressure Test

**Configuration:** MA-2  
**Mach Number:** 1.2  
**Reciprocator Number:** 3.6979F-C2  
**Part Number:** 5.3  
**J:** 7  
**I:** 11

#### Data Table

<table>
<thead>
<tr>
<th>( \tau (\text{msec}) )</th>
<th>( \text{NRIJ(} \tau \text{)} )</th>
<th>( \text{NRIJ(} \tau + \text{Tau} \cdot \text{C(msec) \ ARIJ(} \text{TAU} \cdot \text{C(msec) \ ARIJ(} \text{TAU} \cdot \text{C(msec) \ NRIJ(} \text{-TAU} \cdot \text{C)} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>1.75E 01</td>
<td>0.00</td>
</tr>
<tr>
<td>69</td>
<td>1.72E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>68</td>
<td>1.70E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>67</td>
<td>1.67E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>66</td>
<td>1.65E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>65</td>
<td>1.62E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>64</td>
<td>1.60E 01</td>
<td>0.03</td>
</tr>
<tr>
<td>63</td>
<td>1.57E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>62</td>
<td>1.55E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>61</td>
<td>1.52E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>60</td>
<td>1.50E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>59</td>
<td>1.47E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>58</td>
<td>1.45E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>57</td>
<td>1.42E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>56</td>
<td>1.40E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>55</td>
<td>1.37E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>54</td>
<td>1.35E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>53</td>
<td>1.32E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>52</td>
<td>1.30E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>51</td>
<td>1.27E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>50</td>
<td>1.25E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>49</td>
<td>1.22E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>48</td>
<td>1.20E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>47</td>
<td>1.17E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>46</td>
<td>1.15E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>45</td>
<td>1.12E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>44</td>
<td>1.10E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>43</td>
<td>1.07E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>42</td>
<td>1.05E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>41</td>
<td>1.02E 01</td>
<td>0.01</td>
</tr>
<tr>
<td>40</td>
<td>9.90E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>39</td>
<td>9.75E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>38</td>
<td>9.50E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>37</td>
<td>9.25E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>36</td>
<td>9.00E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>35</td>
<td>8.75E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>34</td>
<td>8.50E 00</td>
<td>0.00</td>
</tr>
<tr>
<td>L</td>
<td>TAU(MSEC)</td>
<td>NRJ,(TAU)</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>1</td>
<td>8.25E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>7.75E 0</td>
<td>0.01</td>
</tr>
<tr>
<td>3</td>
<td>7.55E 0</td>
<td>0.02</td>
</tr>
<tr>
<td>4</td>
<td>7.25E 0</td>
<td>0.03</td>
</tr>
<tr>
<td>5</td>
<td>7.25E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>6</td>
<td>6.75E 0</td>
<td>0.01</td>
</tr>
<tr>
<td>7</td>
<td>6.75E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>8</td>
<td>6.25E 0</td>
<td>0.01</td>
</tr>
<tr>
<td>9</td>
<td>6.25E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>10</td>
<td>5.55E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>11</td>
<td>5.25E 0</td>
<td>0.01</td>
</tr>
<tr>
<td>12</td>
<td>5.00E 0</td>
<td>0.01</td>
</tr>
<tr>
<td>13</td>
<td>4.75E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>14</td>
<td>4.25E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>15</td>
<td>3.75E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>16</td>
<td>3.50E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>17</td>
<td>3.25E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>18</td>
<td>3.00E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>19</td>
<td>2.75E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>20</td>
<td>2.50E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>21</td>
<td>2.25E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>22</td>
<td>2.00E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>23</td>
<td>1.75E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>24</td>
<td>1.50E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>25</td>
<td>1.25E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>26</td>
<td>1.00E 0</td>
<td>0.00</td>
</tr>
<tr>
<td>27</td>
<td>0.00E 0</td>
<td>0.00</td>
</tr>
</tbody>
</table>
## SPECTRAL DATA

### TULLAHOMA 32 PERCENT MERCURY

**FLUCTUATING PRESSURE TEST**

| α = 0°, β = 0° |

| 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 |

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PROTOTYPE</th>
<th>REDUCED</th>
<th>S.F.</th>
<th>XSI</th>
<th>I(F)</th>
<th>NC(J(F)</th>
<th>NC(J(F)</th>
<th>MCD.</th>
<th>OF PHASE OF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FREQ.</td>
<td>FREQ.</td>
<td></td>
<td></td>
<td></td>
<td>COHER.</td>
<td>COHER.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C.</td>
<td>C.</td>
<td>5.84E-04</td>
<td>1.07E-04</td>
<td>0.14</td>
<td>0.14</td>
<td>360.00</td>
</tr>
<tr>
<td>28.57</td>
<td>0.76C</td>
<td>0.04</td>
<td>1.16E-03</td>
<td>1.78E-04</td>
<td>0.04</td>
<td>0.13</td>
<td>0.13</td>
<td>288.40</td>
<td></td>
</tr>
<tr>
<td>57.14</td>
<td>17.41</td>
<td>C.08</td>
<td>1.19E-03</td>
<td>1.42E-04</td>
<td>-0.08</td>
<td>-0.18</td>
<td>0.19</td>
<td>246.82</td>
<td></td>
</tr>
<tr>
<td>85.71</td>
<td>26.11</td>
<td>0.13</td>
<td>1.20E-03</td>
<td>1.44E-04</td>
<td>0.00</td>
<td>-0.14</td>
<td>0.14</td>
<td>271.16</td>
<td></td>
</tr>
<tr>
<td>114.29</td>
<td>34.81</td>
<td>C.17</td>
<td>1.10E-03</td>
<td>1.61E-04</td>
<td>0.12</td>
<td>-0.17</td>
<td>0.20</td>
<td>304.81</td>
<td></td>
</tr>
<tr>
<td>142.86</td>
<td>43.51</td>
<td>0.21</td>
<td>1.03E-03</td>
<td>1.70E-04</td>
<td>0.15</td>
<td>-0.18</td>
<td>0.23</td>
<td>311.44</td>
<td></td>
</tr>
<tr>
<td>171.43</td>
<td>52.22</td>
<td>0.25</td>
<td>1.11E-03</td>
<td>1.76E-04</td>
<td>0.17</td>
<td>-0.11</td>
<td>0.20</td>
<td>326.64</td>
<td></td>
</tr>
<tr>
<td>200.00</td>
<td>60.92</td>
<td>0.25</td>
<td>1.22E-03</td>
<td>2.07E-04</td>
<td>0.21</td>
<td>0.01</td>
<td>0.21</td>
<td>3.99</td>
<td></td>
</tr>
<tr>
<td>228.57</td>
<td>69.62</td>
<td>0.33</td>
<td>1.17E-03</td>
<td>2.41E-04</td>
<td>0.19</td>
<td>0.10</td>
<td>0.21</td>
<td>27.77</td>
<td></td>
</tr>
<tr>
<td>257.14</td>
<td>78.33</td>
<td>0.38</td>
<td>1.07E-03</td>
<td>2.46E-04</td>
<td>0.09</td>
<td>0.11</td>
<td>0.14</td>
<td>51.40</td>
<td></td>
</tr>
<tr>
<td>285.71</td>
<td>87.03</td>
<td>C.42</td>
<td>9.57E-04</td>
<td>2.29E-04</td>
<td>0.01</td>
<td>0.13</td>
<td>0.13</td>
<td>87.37</td>
<td></td>
</tr>
<tr>
<td>314.29</td>
<td>95.73</td>
<td>0.46</td>
<td>9.51E-04</td>
<td>2.28E-04</td>
<td>0.08</td>
<td>0.16</td>
<td>0.18</td>
<td>116.72</td>
<td></td>
</tr>
<tr>
<td>342.86</td>
<td>104.43</td>
<td>C.50</td>
<td>9.92E-04</td>
<td>2.39E-04</td>
<td>-0.16</td>
<td>0.11</td>
<td>0.19</td>
<td>143.82</td>
<td></td>
</tr>
<tr>
<td>371.43</td>
<td>113.14</td>
<td>C.54</td>
<td>9.85E-04</td>
<td>2.29E-04</td>
<td>-0.18</td>
<td>0.00</td>
<td>0.18</td>
<td>181.05</td>
<td></td>
</tr>
<tr>
<td>400.00</td>
<td>121.84</td>
<td>0.58</td>
<td>9.93E-04</td>
<td>2.57E-04</td>
<td>-0.20</td>
<td>0.10</td>
<td>0.22</td>
<td>206.38</td>
<td></td>
</tr>
<tr>
<td>428.57</td>
<td>130.54</td>
<td>0.63</td>
<td>1.02E-03</td>
<td>2.03E-04</td>
<td>-0.10</td>
<td>0.17</td>
<td>0.20</td>
<td>238.49</td>
<td></td>
</tr>
<tr>
<td>457.14</td>
<td>139.25</td>
<td>C.67</td>
<td>1.07E-03</td>
<td>2.17E-04</td>
<td>0.04</td>
<td>0.25</td>
<td>0.26</td>
<td>279.24</td>
<td></td>
</tr>
<tr>
<td>485.71</td>
<td>147.95</td>
<td>C.71</td>
<td>1.07E-03</td>
<td>2.27E-04</td>
<td>0.14</td>
<td>0.25</td>
<td>0.28</td>
<td>289.75</td>
<td></td>
</tr>
<tr>
<td>514.29</td>
<td>156.65</td>
<td>C.75</td>
<td>9.65E-04</td>
<td>2.08E-04</td>
<td>0.22</td>
<td>0.13</td>
<td>0.25</td>
<td>329.46</td>
<td></td>
</tr>
<tr>
<td>542.86</td>
<td>165.35</td>
<td>C.79</td>
<td>8.85E-04</td>
<td>2.02E-04</td>
<td>0.29</td>
<td>0.03</td>
<td>0.29</td>
<td>6.35</td>
<td></td>
</tr>
<tr>
<td>571.43</td>
<td>174.06</td>
<td>0.83</td>
<td>8.55E-04</td>
<td>2.42E-04</td>
<td>0.27</td>
<td>0.17</td>
<td>0.32</td>
<td>32.83</td>
<td></td>
</tr>
<tr>
<td>600.00</td>
<td>182.76</td>
<td>0.88</td>
<td>8.30E-04</td>
<td>2.56E-04</td>
<td>0.16</td>
<td>0.26</td>
<td>0.31</td>
<td>59.05</td>
<td></td>
</tr>
<tr>
<td>628.57</td>
<td>191.46</td>
<td>0.92</td>
<td>7.77E-04</td>
<td>2.29E-04</td>
<td>0.01</td>
<td>0.31</td>
<td>0.31</td>
<td>87.40</td>
<td></td>
</tr>
<tr>
<td>657.14</td>
<td>200.27</td>
<td>0.96</td>
<td>7.61E-04</td>
<td>2.30E-04</td>
<td>-0.15</td>
<td>0.33</td>
<td>0.36</td>
<td>113.96</td>
<td></td>
</tr>
<tr>
<td>685.71</td>
<td>208.87</td>
<td>1.00</td>
<td>6.92E-04</td>
<td>2.39E-04</td>
<td>-0.24</td>
<td>0.30</td>
<td>0.38</td>
<td>128.07</td>
<td></td>
</tr>
<tr>
<td>714.29</td>
<td>217.57</td>
<td>1.04</td>
<td>6.40E-04</td>
<td>2.33E-04</td>
<td>-0.31</td>
<td>0.16</td>
<td>0.35</td>
<td>152.39</td>
<td></td>
</tr>
<tr>
<td>742.86</td>
<td>226.27</td>
<td>1.08</td>
<td>6.56E-04</td>
<td>2.31E-04</td>
<td>-0.35</td>
<td>0.04</td>
<td>0.35</td>
<td>174.85</td>
<td></td>
</tr>
<tr>
<td>771.43</td>
<td>234.97</td>
<td>1.13</td>
<td>6.11E-04</td>
<td>2.37E-04</td>
<td>-0.76</td>
<td>0.05</td>
<td>0.26</td>
<td>102.05</td>
<td></td>
</tr>
<tr>
<td>800.00</td>
<td>243.68</td>
<td>1.17</td>
<td>6.91E-04</td>
<td>2.24E-04</td>
<td>-0.12</td>
<td>0.15</td>
<td>0.19</td>
<td>223.41</td>
<td></td>
</tr>
<tr>
<td>828.57</td>
<td>252.38</td>
<td>1.21</td>
<td>4.86E-04</td>
<td>2.27E-04</td>
<td>0.00</td>
<td>0.20</td>
<td>0.20</td>
<td>270.26</td>
<td></td>
</tr>
<tr>
<td>857.14</td>
<td>260.99</td>
<td>1.25</td>
<td>4.35E-04</td>
<td>2.34E-04</td>
<td>0.09</td>
<td>0.21</td>
<td>0.23</td>
<td>293.62</td>
<td></td>
</tr>
<tr>
<td>885.71</td>
<td>269.79</td>
<td>1.29</td>
<td>4.00E-04</td>
<td>2.07E-04</td>
<td>0.13</td>
<td>0.18</td>
<td>0.22</td>
<td>304.84</td>
<td></td>
</tr>
<tr>
<td>914.29</td>
<td>278.49</td>
<td>1.33</td>
<td>3.94E-04</td>
<td>1.76E-04</td>
<td>0.16</td>
<td>-0.10</td>
<td>0.19</td>
<td>329.58</td>
<td></td>
</tr>
<tr>
<td>942.86</td>
<td>287.19</td>
<td>1.38</td>
<td>3.56E-04</td>
<td>1.66E-04</td>
<td>0.24</td>
<td>-0.01</td>
<td>0.24</td>
<td>357.41</td>
<td></td>
</tr>
<tr>
<td>971.43</td>
<td>295.90</td>
<td>1.42</td>
<td>3.06E-04</td>
<td>1.84E-04</td>
<td>0.26</td>
<td>0.05</td>
<td>0.27</td>
<td>11.21</td>
<td></td>
</tr>
<tr>
<td>1000.00</td>
<td>304.60</td>
<td>1.46</td>
<td>2.72E-04</td>
<td>1.75E-04</td>
<td>0.16</td>
<td>0.11</td>
<td>0.20</td>
<td>33.38</td>
<td></td>
</tr>
</tbody>
</table>

7. REFERENCES

