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Research Report

EVERGREEN POINT BRIDGE
MAINTENANCE PROBLEMS

ANNUAL REPORT

AUGUST 1976

Public Transportation and Planning Division



Washington State
Department of Transportation

WA-RD-44.3

In cooperation with
U.S. Department of Transportation
Federal Highway Administration

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16. Abstract This report reflects a year of data gathering together with the completion of analysis programs. These programs include the initial tape conversion, data rejection and selection, fast Fourier transform coefficient computation. Complete statistics of measurements are given.					
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EVERGREEN POINT BRIDGE MAINTENANCE PROBLEMS

Principal Investigator

C. B. Brown

Department of Civil Engineering
University of Washington

PROGRESS REPORT
(Second Annual Report)

Research Project Y-1640
Phase II

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Federal Highway Administration

August 1976

The contents of this report reflects the views of the author who is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Washington State Department of Highways or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

CONTENTS

	Page
INTRODUCTION	1
INSTRUMENTATION	4
DATA ACCUMULATION AND ANALYSIS	4
PREDICTIONS	8
APPENDIX A	17
APPENDIX B	18
APPENDIX C	19



INTRODUCTION

The work described in this report is the second year of study of the performance of the drawspan of the Evergreen Point Bridge. This report is a continuation of the Interim Report (First Annual Report) of August 1975. Therefore, only work performed in the 1975-76 contract year is included here.

The instrumentation and data recording was in the hands of Mr. Derald Christensen. The analysis of data was by Mr. Christensen and Mr. R. Vasu. For reference, the Channel Arrangement is shown on Fig. 1 with locations described in the table. Mr. Gary F. Demich has continued to provide liaison with the Highway Department. A paper of the subject of this contract was prepared by Brown, Christensen and Demich. It was presented at the A.S.C.E. 1976 National Structural Engineering Conference. A copy of the paper is included in Appendix A.

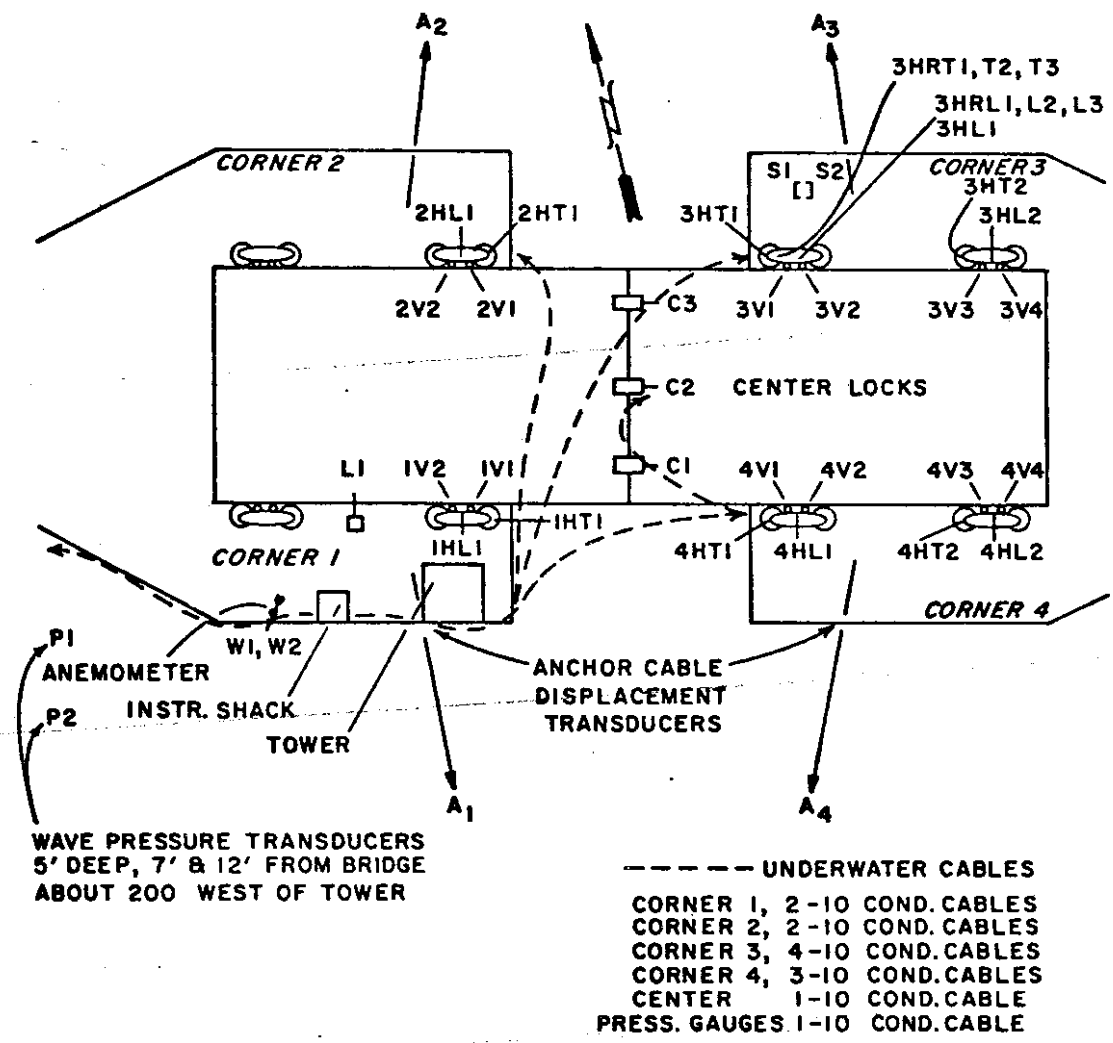


FIGURE 1

Channel Number	Mark	Measurement	
1	W1	Wind Speed	
2	W2	Wind direction	
3	1HL1	Horizontal trunnion strains	
4	1HT1		
5	2HL1		
6	2HT1		
7	3HL1		
8	3HT1		
9	3HL2		
10	3HT2		
11	3HRL1		
12	3HRL2		
13	3HRL3		
14	3HRT1		
15	3HRT2		
16	3HRT3		
17	4HL1		
18	4HT1		
19	4HL2		
20	4HT2		
21	1V1		Vertical trunnion tension rod strains
22	1V2		
23	2V1		
24	2V2		
25	3V1		
26	3V2		
27	3V3		
28	3V4		
29	4V1		
30	4V2		
31	4V3		
32	4V4		
33	C1	Center lock strains	
34	C2		
35	C3		
36	L1	End lock strains	
37	S1	Vertical trunnion support beam strains	
38	S2		
39	P1	Wave pressure transducers	
40	P2		
41	A1	Anchor cable displacements	
42	A2		
43	A3		
44	A4		

INSTRUMENTATION

As reported on pages 18 and 22 of the First Interim Report, Channels 3 through 20, associated with strains on horizontal trunnions, showed intermittent signals generated by shock loading. This battering effect could not be adequately sampled at the existing 2 Hertz rate and an alternative system has been designed, installed and used in the 1975-76 storm season.

The actual type of strain signal could not be determined from the original instrumentation except that it occurred over less than $\frac{1}{2}$ sec. In fact, the pulse transpired to be less than 400 m.s. A circuit was designed to hold the peak in $\frac{1}{2}$ second sampling interval and to record this peak value at the end of the interval. The circuit is shown on Fig. 2. Unfortunately, it was not commercially available and the design and successful installation was completed by the end of November 1975. The results from this system have been quite valid.

The remaining instrumentation is as provided in the first year of work.

DATA ACCUMULATION AND ANALYSIS

It was found that data set size (92115 samples/record) could not be efficiently handled by the existing software for converting the original tapes and subsequent data analysis. In all cases, the basic problem was the increase in job costs when such large data blocks were used. The charges in accounting and charges at the University of Washington Computer Center in part changed the economic viability of existing packages.

New software was prepared to process the conversion and analysis of data efficiently. This tape conversion program was fully effective in February, 1976. Existing programs were employed until this time. Appendix B displays these currently used programs.

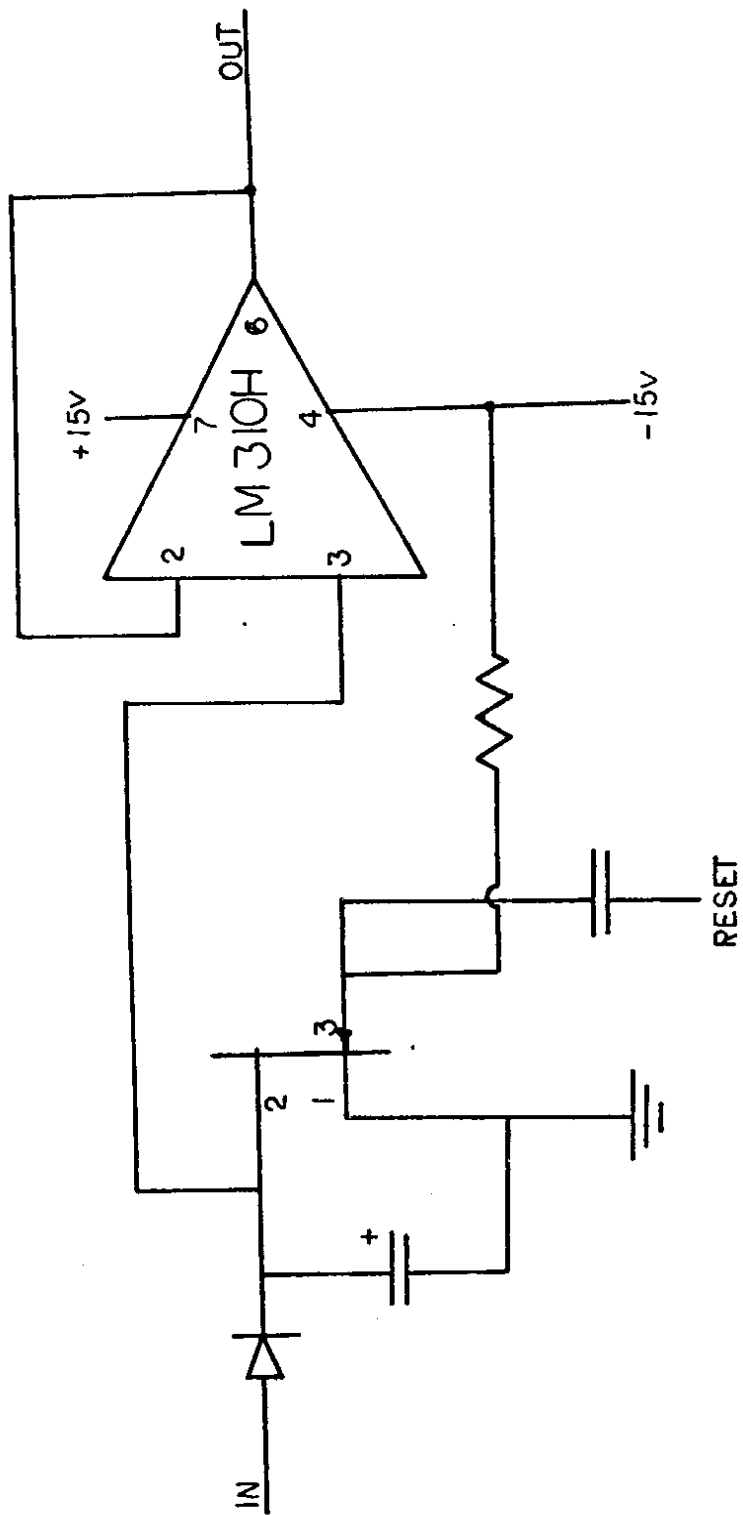


FIG. 2 SAMPLE HOLDING CIRCUIT

The following Table shows the various data records made. The Table includes tape number, dates tape was in instrument, number of records with wind over 20 m.p.h. and comments. Tapes 21 through 33 have been analysed fully. Appendix C gives a summary of statistical data for these 71 records. Essentially, the analysis has presented the maximum, minimum, mean and standard deviation for each record.

Complete recording during the 1975-76 storm season was frustrated by adjustments to instrumentation made necessary by alterations and construction carried out on the drawspan vicinity. Channels 41 through 48 were continually out of action up to January 1976. This was caused by construction activity and subsequent repeated damage to the transducer extension rods. A more usual interruption occurred because of anchor cable adjustment at the spring and fall water level change. Damage to Channel 36 on the end lock was caused by bridge opening and at the replacement of the endlock.

The complete system was out of action in March and most of April, 1976 due to the installation of wave deflectors and relocation of the instrument shed. The wave transducers had to be removed permanently to make way for the wave deflectors.

TAPES AND RECORDING DATES

Tape #	Dates		No. of Rec.	Comments
EG 1	3/21/75	3/24/75		initial calibration
EG 2	3/25/75	3/26/75		
EG 3	4/2/75	4/2/75		
EG 4	4/2/75	4/28/75		
EG 5	4/28/75	5/3/75		
EG 6	5/3/75	5/4/75		
EG 7	5/5/75	5/18/75		
EG 8	5/18/75	6/11/75		← out for summer
EG 9	10/3/75	10/7/75		calibration and testing
EG 10	11/5/75			
EG 11	11/6/75	11/7/75		
EG 12	11/7/75	11/10/75		
EG 13				
EG 14	11/14/75	11/17/75		
EG 15	11/21/75	11/23/75		
EG 16	11/23/75	11/25/75		
EG 17	11/26/75	11/30/75		
EG 18	11/30/76	12/1/75		
EG 19	12/1/75	12/2/75		used for analysis
EG 20	12/2/75	12/3/75		
EG 21	12/4/75	12/12/75	1	
EG 22	12/12/75	12/15/75	6	
EG 23	12/15/75	12/26/75	-	
EG 24	12/26/75	12/29/75	9	
EG 25	12/31/75	1/11/76	12	
EG 26	1/11/76	1/13/76	3	
EG 27	1/13/76	1/14/76	3	
EG 28	1/14/76	2/2/76	1	
EG 29	2/2/76	2/8/76	3	
EG 30	2/9/76	2/17/76	10	
EG 31	2/7/76	2/25/76	10	
EG 32	2/25/76	2/27/76	7	
EG 33	2/27/76	2/29/76	6	
EG 34	4/18/76	→		

PREDICTIONS

One objective of the study is to determine a statistical history of straining on essential elements. The process of the study is as follows:

- a) The recording of single season wind and strain data;
- b) The statistical analysis of such wind and strain data;
- c) The obtaining of the long term wind data;
- d) The development of the relationship between the long term wind data and single season wind data;
- e) The development of the relationship of single season strains with single season wind data
- f) The use of (d) and (e) to obtain a long term strain forecast.

Parts (a) and (b) have been dealt with in the previous portion of this report. Here (c) and (d) will be discussed fully and the position on (e) and (f) reviewed.

Information from the Highway Department for the period from March 1964 to June 1975 showed the wind speed and direction taken at a minimum of 8 hourly intervals. In all 12150 such observations were recorded and are organised in the Table. Here the number of observations in 10 m.p.h. bands at various wind directions are set out and the percentage of the total record figured below. When only recordings over 20 m.p.h. are included, 2701 observations are relevant. It is clear, from this data, that the predominant wind is from the south, where 31% of the results occur.

In contrast to this long term data, the single season record included 76 samples, 70 with wind speeds over 20 m.p.h.

In order to have a valid transformation from short term to long term results, the method of maximizing entropy was used to present the data. This method essentially asks the question: "What distribution describes the data,

PERCENTAGE FREQUENCY DISTRIBUTION OF EVERGREEN POINT FLOATING BRIDGE WIND DATA
 March 1964-June 1975

Speed in m.p.h.	0-10	10-20	20-30	30-40	40-50	50-60	60-70	over 70	TOTAL
Direction									
N	884.0 7.3	384.0 3.2	27.0 .2	1.0 .1	0 0	0 0	0 0	0 0	1296.0 10.7
NE	1058.0 8.7	302.0 2.5	10.0	0.0 .1	1.000 .005	0 0	0 0	0 0	1371.0 11.3
NW	354.0 2.9	213.0 1.8	24.0 .2	6.0 0	0 0	0 0	0 0	0 0	597.0 4.9
S	918.0 7.6	1356.0 11.2	848.0 7.0	484.0 4.0	129.0 1.1	26 2	5 0	3 0	3769.0 31.0
SE	801.0 6.6	544.0 4.5	179.0 1.5	59.0 .5	15.0 .1	2 0	0 0	0 0	1600.0 13.2
E	1198.0 1.6	40.0 .3	6.0 .0	1.0 .0	0 0	0 0	0 0	0 0	1207.0 9.9
W	199.0 1.6	21.0 .2	5.0 .0	1.0 .0	0 0	0 0	0 0	0 0	226.0 1.9
Calm and others	1744.0 94.8	76.0 .6	13.0 .1	4.0 .0	1 0	0 0	0 0	0 0	1839.0 15.1
Total	6524.0 53.7	3342.0 27.5	1376.0 11.3	680.0 5.6	182.0 1.5	34.0 .3	9.0 .1	3 0	12,150.0 100.0

TOTAL 12,150 VALUES

as presented through averages, without employing any bias?" The answer is, that distribution which maximizes the entropy subject to the constraints of the data. Hence a program

$$\text{Max } H = - \sum_i p_i \text{ Ln } p_i$$

subject to:

$$\sum_i p_i \gamma_i^n = \bar{\gamma}_n$$

$$\sum_i p_i = 1$$

$$p_i \geq 0; \quad M \leq \gamma_i \leq L$$

where p_i is the probability of γ_i , H is the entropy, $\bar{\gamma}_n$ the n^{th} average of γ_i and L and M limits on γ_i , provides the unbiased estimate of p_i . In our case $L = \infty$ and n takes on values of 1 and 2. M is the lowest wind speed or strain included. This means that the data confidently produces a mean and a standard deviation together with a lower limit of zero. The resulting probability distributions are always exponential and depend on the value of n . Thus for $L = -M = \infty$, and $n = 2$, the probability is normal. The analysis is by Lagrangian multipliers, λ_j , $j = 0$ to n giving the distribution

$$p(x) = \exp (-\lambda_0 - \lambda_1 x - \lambda_2 x^2 \dots - \lambda_n x^n)$$

The Table gives the values of the λ , mean and standard deviation for this distribution with $n = 2$ for the complete data, complete data over 20 m.p.h., the season data and the season data over 20 m.p.h.

DESCRIPTION OF THE PARAMETERS FOR DIFFERENT TYPE OF DATA

$$f(x) = \exp (-\lambda_0 - \lambda_2 x - \lambda_2 x^2)$$

Number of Values and Type of Data	Description of Parameters		
12150 Complete data	AVG = 12.712 $\lambda_0 = 6.670$	Std. dev. = 10.996 $\lambda_1 = -0.105$	VAR = 120.91740 $\lambda_2 = 0.00413$
2701 Speed greater than 20 m.p.h.	AVG = 29.647 $\lambda_0 = 11.240$	Std. dev. = 8.689 $\lambda_1 = -0.392$	VAR = 75.5070 $\lambda_2 = 0.0066$
76 Sample data (instrumented)	AVG = 24.923 $\lambda_0 = 18.056$	Std. dev. = 4.678 $\lambda_1 = -1.138$	VAR = 21.8900 $\lambda_2 = 0.0228$
70 Speed greater than 20 m.p.h.	AVG = 25.866 $\lambda_0 = 38.032$	Std. dev. = 3.082 $\lambda_1 = -2.722$	VAR = 9.5008 $\lambda_2 = 0.0520$

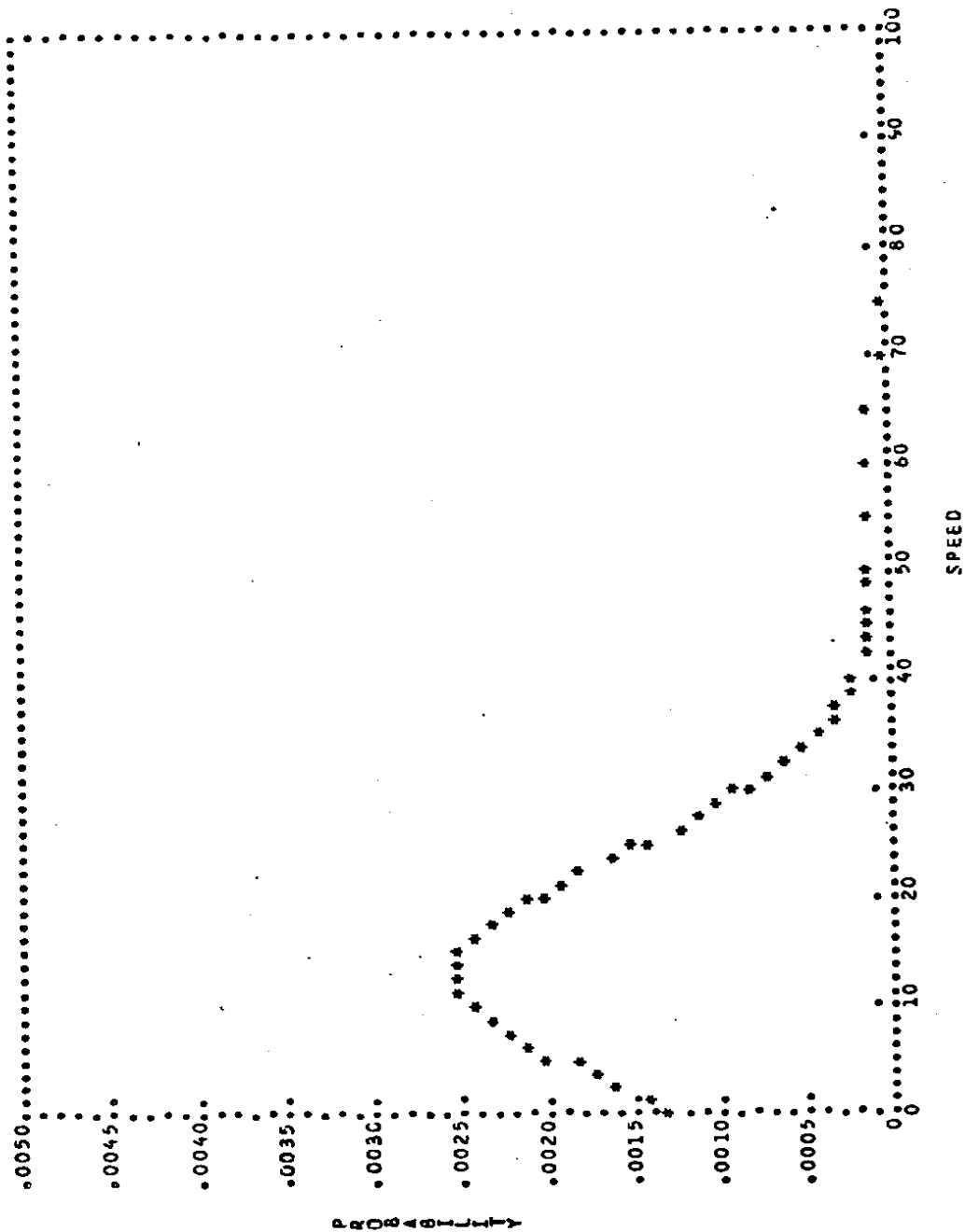
Fig. 3 through 6 provide plots of these distributions.

Two features are now exhibited; unbiased distributions for long term and seasonal wind data. The seasonal data for wind must be related to the same data for strain. The transformation must be in terms of the mean, standard deviation and extremes of wind. Then the strain can be expressed as a function of the wind mean speed, standard deviation and limits. Thus, the seasonal wind information (Fig. 6) can be transformed to the seasonal strain information.

$$p(\epsilon) = f(\mu_W, \sigma_W, W_{\min}, W_{\max}, W)$$

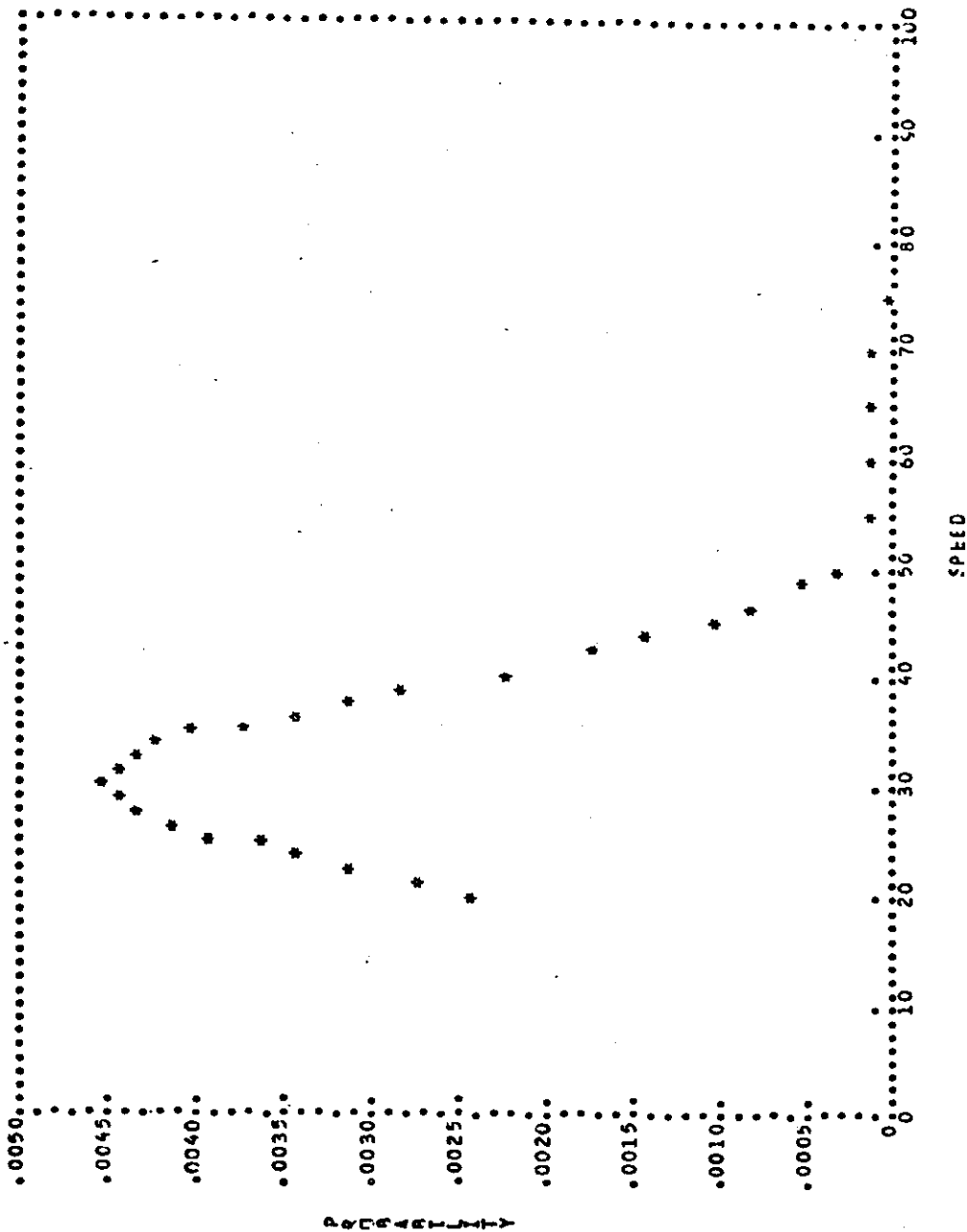
In a like manner, the same transformation applied to the long term wind (Fig. 4) leads to the long term strain distribution. The ongoing analysis is centered around the description of this transformation.

PROBABILITY DISTRIBUTION FUNCTION FOR EVERGREEN WIND DATA
LONG TERM OBSERVATION



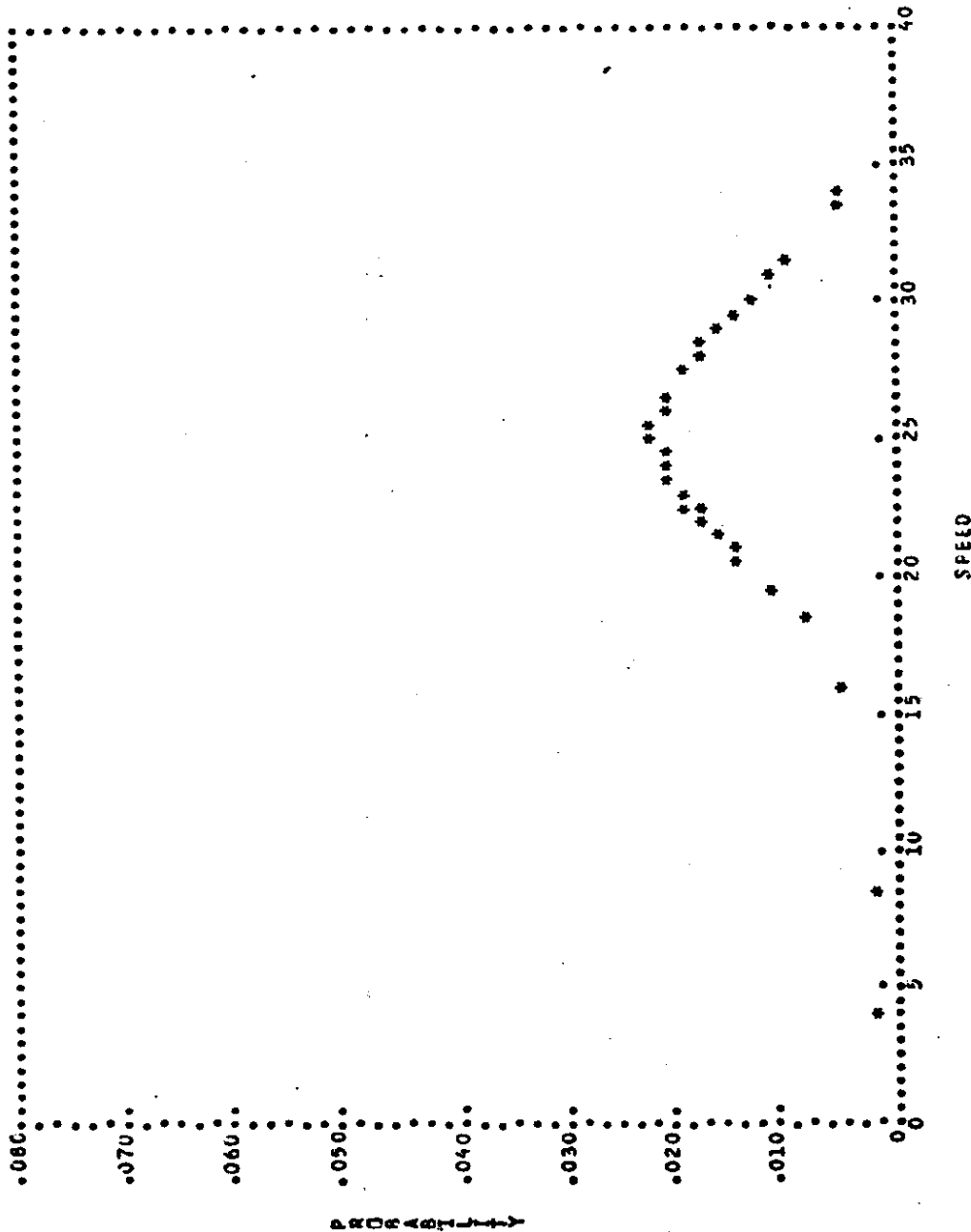
SPEED (12.72, 11.00) VERSUS FX (.001798, .0006532) 12150 VALUES

PROBABILITY DISTRIBUTION FUNCTION FOR EVERGREEN WIND DATA
SPEED OVER 20MPH



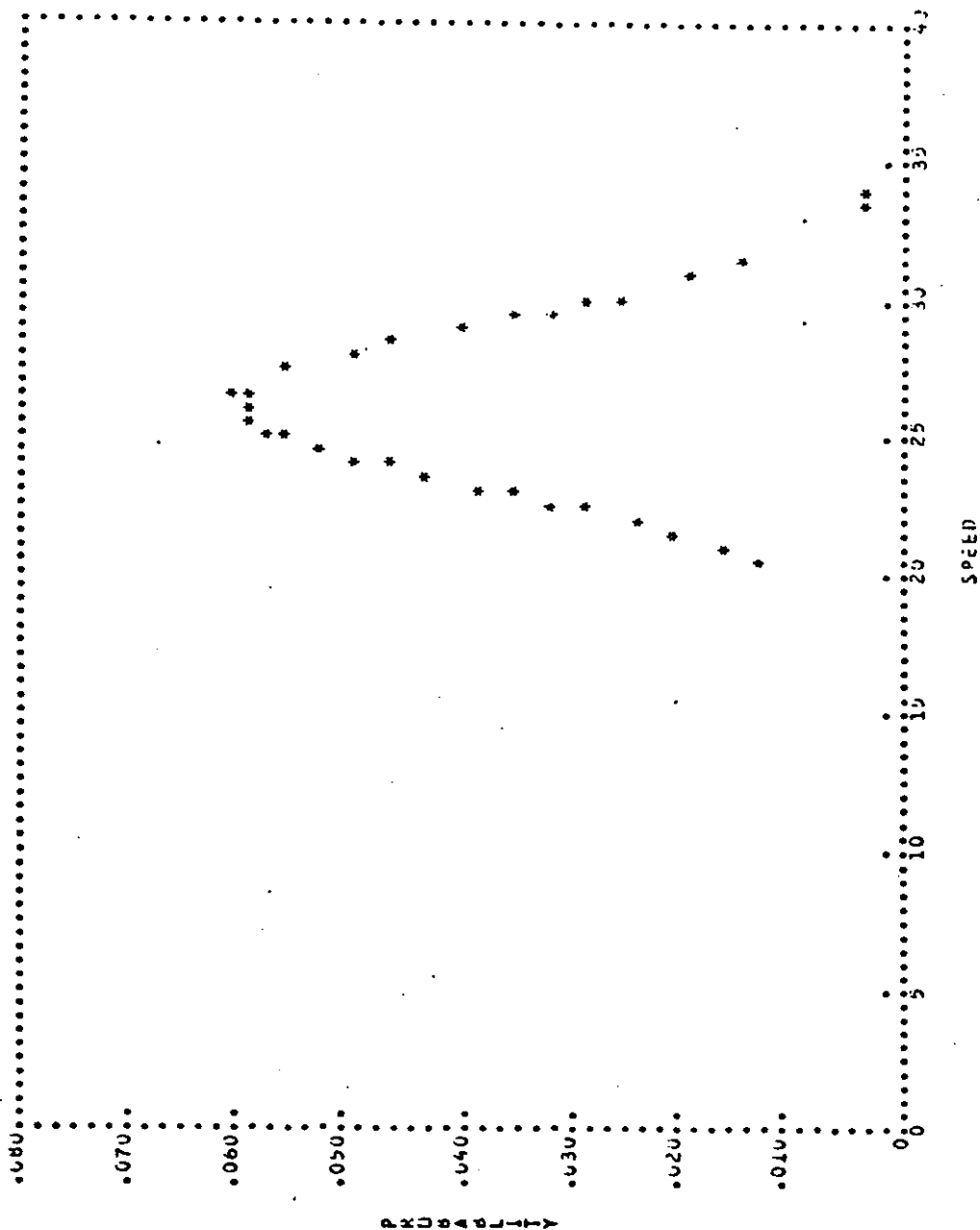
SPFD (29.658.691) VERSUS FX (.003174,.001093) 2701 VALUES

PROBABILITY DISTRIBUTION FUNCTION OF EVERGREEN WIND DATA
SHORT TERM INSTRUMENTED OBSERVATION



SPEED (24.92,4.710) VERSUS FX (.01622,.005258) 76 VALUES

PROBABILITY DISTRIBUTION FUNCTION OF EVERGREEN WIND DATA
SHORT TERM INSTRUMENTED OBSERVATION SPEED OVER 20MPH



SPEED (25.97, 3.105) VERSUS FX (.00044, .01565) 70 VALUES

APPENDIX A

Paper by C. Brown, D. Christensen and G. Demich

Entitled

"Evergreen Point Bridge Maintenance Problems"

Presented at:

National Structural Engineering Conference
A.S.C.E.
Madison, Wisconsin, 1976

EVERGREEN POINT BRIDGE MAINTENANCE PROBLEMS

C. B. Brown¹, M.A.S.C.E., D. R. Christensen¹ and G. F. Demich²

Synopsis

The Evergreen Point Bridge includes 7,518' of floating structure in Lake Washington. Near the middle of this structure is a 200' drawspan arrangement. Severe damage due to wave battering has caused failure of elements of this drawspan and storm closures have been instituted to prevent such damage. The study reported was to obtain information which would allow orderly maintenance procedures to be set up with minimum interference with the bridge operation. This information is being obtained by the measurement of critical strains and wind characteristics. The analysis of the recorded strain signals allows the frequency associated with a given strain level to be determined. Including these results and the number of cycles to failure for various stress levels and ranges, into Miner's hypothesis allows the time to failure to be estimated. The paper describes the methods adopted to carry out such a procedure on the Evergreen Point Bridge.

Introduction

The Evergreen Point Bridge crosses Lake Washington from the east into Seattle. The region of interest is the 7,518' of floating structure and particularly the 200' drawspan arrangement near mid-lake. Fig. 1 shows the location of the structure with a 4 mile fetch from the Mercer Island floating bridge. Storms are predominantly from the south and southwest directions. The highest gust velocity was from the southwest at 87 mph and the highest one hour average was 47 mph. In contrast, the highest wind speed from the north over the last 10 years was 40 mph. Since the bridge was completed in 1963, storms have caused damage to the mechanical parts of the drawspan. Various replacements and improvements have been subsequently made. The object of this study, which was initiated in August, 1974, is to determine a program for efficient maintenance of the drawspan arrangement. Additionally, the measurements and analyses may suggest design improvements.

An impression of the drawspan arrangement is given in Fig. 2. The operation requires the raising of the two 105' steel grid decks by 7'-2" to allow the long structural movement of the drawspan pontoons in to the vacated spaces. Previous damage and experience had shown that the trunnion and locking devices should be studied. However, anchor cables adjacent to the opening were also instrumented and wind velocities and wave pressures were recorded.

¹Department of Civil Engineering, University of Washington, Seattle, WA
²Washington State Highway Commission, Olympia, Washington

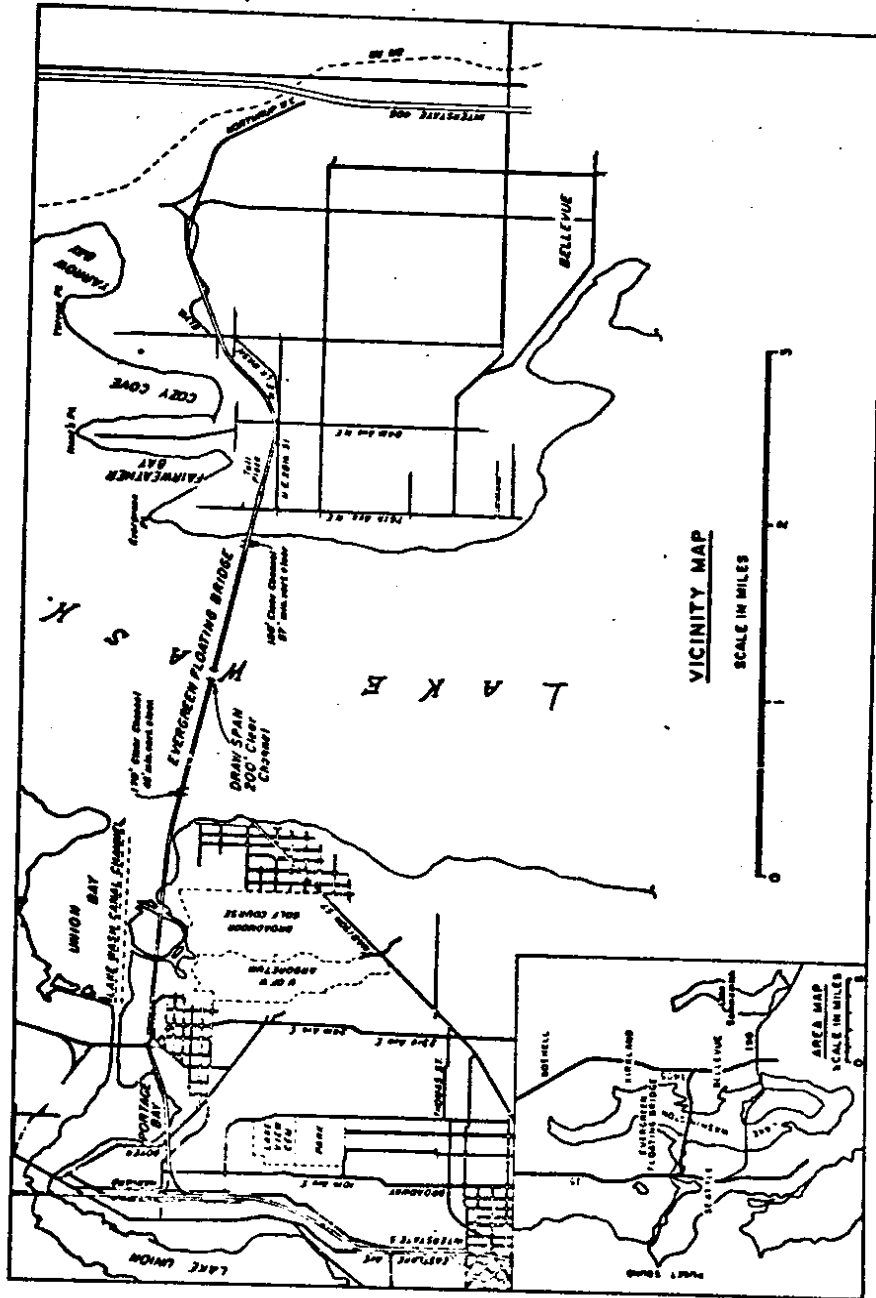
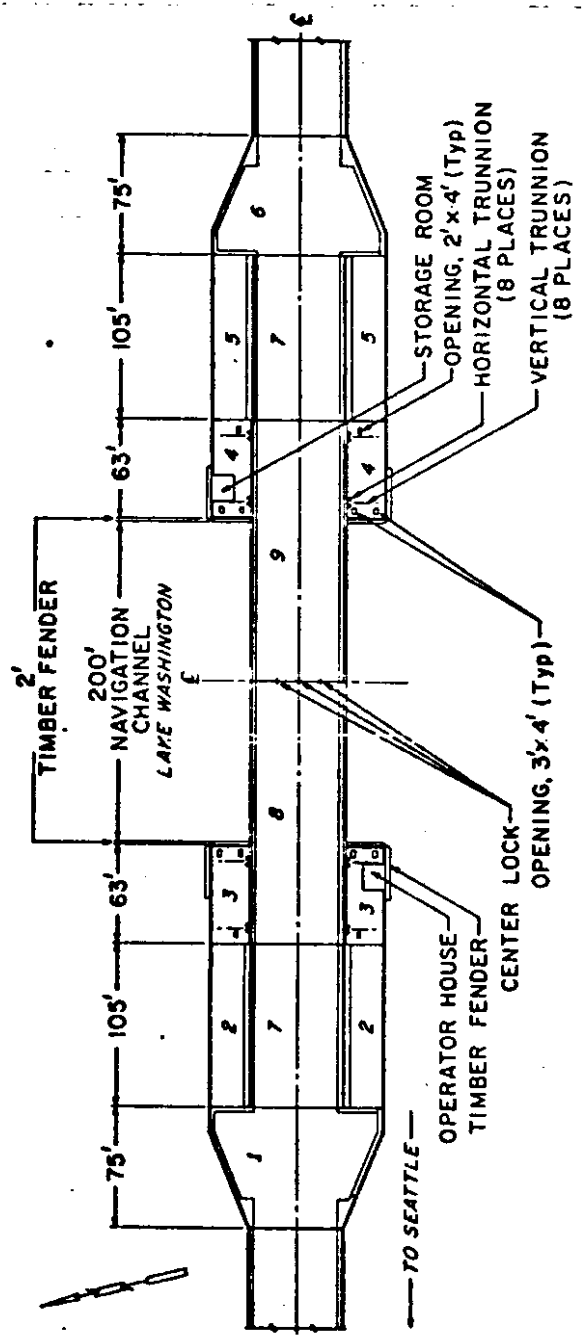


FIGURE 1 BRIDGE LOCATION



- 1 FLARE PONTOON K
 2 FLANKING PONTOON L
 3 FLANKING PONTOON LL
 4 FLANKING PONTOON OO
 5 FLANKING PONTOON O
 6 FLARE PONTOON P
 7 LIFT SPAN (STEEL GRID DECK)
 8 WEST DRAW PONTOON M
 9 EAST DRAW PONTOON N

PLAN VIEW

FIGURE 2 DRAWSPAN FEATURES

The damage to the parts of the drawspan was cumulative and a possible measure for failure due to these conditions is Miner's hypothesis. In this, failure occurs when

$$\sum_i \frac{n_i}{N_i} = 1 \quad (1)$$

where n_i is the number of actual cycles of oscillatory stress range $\pm S_i$ and N_i is the number of cycles to cause failure in this range. The various n_i can be expressed as

$$N_i = \alpha_i T_f f_i \quad (2)$$

where α_i is the proportion of the time and f_i , the frequency of oscillation at the stress range $\pm S_i$. T_f is the total time to failure of the stressed part and is described by

$$T_f = \left[\sum_i \frac{\alpha_i f_i}{N_i} \right]^{-1} \quad (3)$$

This paper describes a set of measurements that were designed to give an estimate of T_f . They concentrate on the part $\alpha_i f_i$ which must be obtained from the actual field conditions. The N_i require laboratory testing.

Experimental Design

The record of strain (ϵ) as it varied with time (t) was to be taken for x minutes every hour whilst wind speeds exceeded a definite value. This record can be considered as typical for the encompassing hour period. The mean of the record was the existing static stress and is zero for the oscillatory stress record. Hence, the variance is given by the second moment of the sample data as

$$\sigma^2(\epsilon) = M_2 \quad (4)$$

Additionally, time may be introduced into the statistics of $\epsilon(t)$ by the correlation

$$C(\tau) = \lim_{T \rightarrow \infty} \frac{1}{T} \int_{-T/2}^{T/2} \epsilon(t) \epsilon(t+\tau) dt \quad (5)$$

which for a stationary process may be expressed as

$$C(\tau) = \int_{-\infty}^{\infty} D(f) e^{i2\pi f\tau} df \quad (6)$$

with inverse

$$D(f) = \int_{-\infty}^{\infty} C(\tau) e^{-i2\pi f\tau} d\tau \quad (7)$$

$D(f)$ is the two-sided spectral density function and if the frequency is positive, then the one-sided spectral density function is

$$G(f) = 2 D(f) ; 0 \leq f \leq \alpha$$

$$G(f) = 0 ; f < 0 \quad (8)$$

Equations (4) and (8) are related by

$$\sigma^2 = \int_0^{\infty} G(f) df \quad (9)$$

and $G(f)$ represents the frequency content of $\epsilon(t)$.

For the j^{th} sample, the standard deviation is σ_j . The system is elastic and hence, the strains are linearly related to stresses. The frequencies for all strains, $k\sigma_j$, are now required. For $k = 1$

give an estimate of $f_j(k=1)$. The dependence of $f_j(k=1)$ on σ_j is obtained from the above testing

$$f_j(k=1) = \frac{1}{\sigma_j^2} \int_0^{\infty} f \cdot G_j(f) df \quad (10)$$

Experimental Factor

If $\epsilon(t)$ is assumed to be narrow banded and normally distributed about a zero mean then, using the Huston-Skopinski assumption¹, the probability density for the peak magnitudes and of the envelope are given by the Rayleigh distribution

for the oscillator stress $\epsilon = k\sigma_j$ the second moment of the

$$p_j(\epsilon = k\sigma_j) = \frac{k}{\sigma_j} e^{-\frac{k^2}{2}} \quad (11)$$

hence

$$\frac{p_j(k)}{p_j(1)} = k e^{-1/2(k^2-1)} \quad (12)$$

Additional time t can be introduced into the solution of

Now if

$$\frac{f_j(k)}{f_j(1)} = \frac{p_j(k)}{p_j(1)} \quad (13)$$

then

$$f_j(k) = \frac{k}{\sigma_j^2} e^{-1/2(k^2-1)} \int_0^{\infty} f \cdot G_j(f) df \quad (14)$$

N as a function of k can be obtained from endurance test data. Then for the j^{th} sample of a year record, the ratio in equation (3) is

$$\frac{1}{24 \times 365} \int_0^{\infty} \frac{f_j(k)}{N(k)} dk \quad (15)$$

and

$$T_f = \left[\sum_j \left\{ \int_0^{\infty} \frac{f_j(k)}{N(k)} dk \right\} \right]^{-1} \quad (16)$$

The field experiment is, therefore, required to provide a record of $\epsilon(t)$ for x minutes of every hour that the wind speed exceeds a definite value. Hence, $\epsilon(t)$ and $v(t)$ should be recorded. (Later in the paper these records are needed to improve T_f by the inclusion of effects beyond one year). The experiment for $N(k)$ should provide typical endurance test results.

Data Recording Device

The field experiment outlined suggests the requirements of a data recording device. Four approaches were considered, namely a strip chart, F.M. analog magnetic tape, digital magnetic tape recorders and a mini-computer with digital to analog conversion. The strip chart recorder was not employed because of the anticipated large data output with the resulting unrealistic time demand for data reduction. Although the F.M. tape recorder allows the use of any analysis technique and the original data is retained, its use was abandoned for the following reasons:

- a) each recorder available is limited to 14 channels,
- b) over 500' of one inch wide magnetic tape is required for each hour of recording for each 14 channel recorder at the required 1 3/4' per second tape speed,
- c) additional hardware (digital recorder or mini-computer) is required to place the data in digital form,
- d) high power requirements,
- e) calibration and calibration maintenance is difficult,
- f) cost comparable to complete digital recording system with many times the input channel capacity,
- g) the electronics for the input measuring devices or transducers have to be a separate package.

Finally, the mini-computer was not used because of the large initial expenditure in spite of the advantages. Also, the incorporation of a mini-computer into the tape conversion step would provide the maximum facility in analysing the data but was too expensive.

The conclusion was to record the data in digital form and to use a main computer facility for data reduction and analysis. In this way the complete instrumentation was designed around a single system with maxi-

imum reliability and minimum cost for each input channel. The main disadvantage in using the digital format is that once the sampling interval is selected, estimation of intermediate points leads to some doubts concerning the validity of this output. The initial selection, then, proves to be important.

The digital system used in this project was the Sea Data Corporation's incremental four-track digital cassette recorder, Model 610. The attractive features of the system are:

1. size (the recorder is 4.4" high by 3.9" x 3.7");
2. inexpensive (\$1200 with recorder and data stream electronics);
3. 11.5 m. bits per tape (standard cassette, 0.15" wide tape);
4. high speed (300 steps per second at 4 bits per step);
5. high density (800 steps per inch or 3200 bits/inch);
6. modular construction (free choice of number of input channels up to a maximum sample word size of 400 bits);
7. low power requirements (2 amp. hours from 9-15 volt source to record 300' tape over any time period);
8. only six moving parts;
9. all parts replaceable in the field without re-alignment;
10. transducer electronics can be incorporated into recorder design;
11. data capacity expandable in 11.5 m. bit blocks with only one transport and motor driven card required per block (\$700 per block);
12. full line of electronic cards available;
13. high accuracy (1 sample or less in 10,000 lost in field experience of tape conversion);
14. four hours of continuous sample data on 300' tape using 44 8-bit data channel, 12-bit clock and sampling twice a second.

The instrumentation package consists of an incremental digital cassette recorder; three printed circuit cards which control the recorder and data stream to the recorder and a clock card that generates the pulse, which control the data shifting and other time-oriented functions of the recorder. Associated with each pair of input channels are four single cards; one contains two-frequency counters and shift registers (adjustable from 4 to 16 bits), and the other three are used for voltage to frequency conversion, bridge amplification and bias adjustments. These last three cards and all remaining electronics were designed and built at the University of Washington with the idea of taking full advantage of the Sea Data recording system. Fig. 3 gives a schematic of the instrumentation and recording package layout.

Figure 3 indicates the operation of the System. Transducers provide various types of information and the first card depends on the class of measurement. In some cases, the input signal is passed in to a bridge and run through a signal conditioning card where the bias or off-set can be adjusted, the polarity reversed and a zero to ten amplification applied. Thus, amplification is employed in the field for scale factor or calibration adjustment. Where the bridge circuit is not used or where large amplifications are not required, this card is set up as the input to the transducers. In this circumstance, either a blank or a card with additional electronics, depending on the type of measurement being made, is inserted instead of the amplifier card.

MUT...
 advantage...
 value...
 concern...
 proves...

The...
 tion...
 attractive...

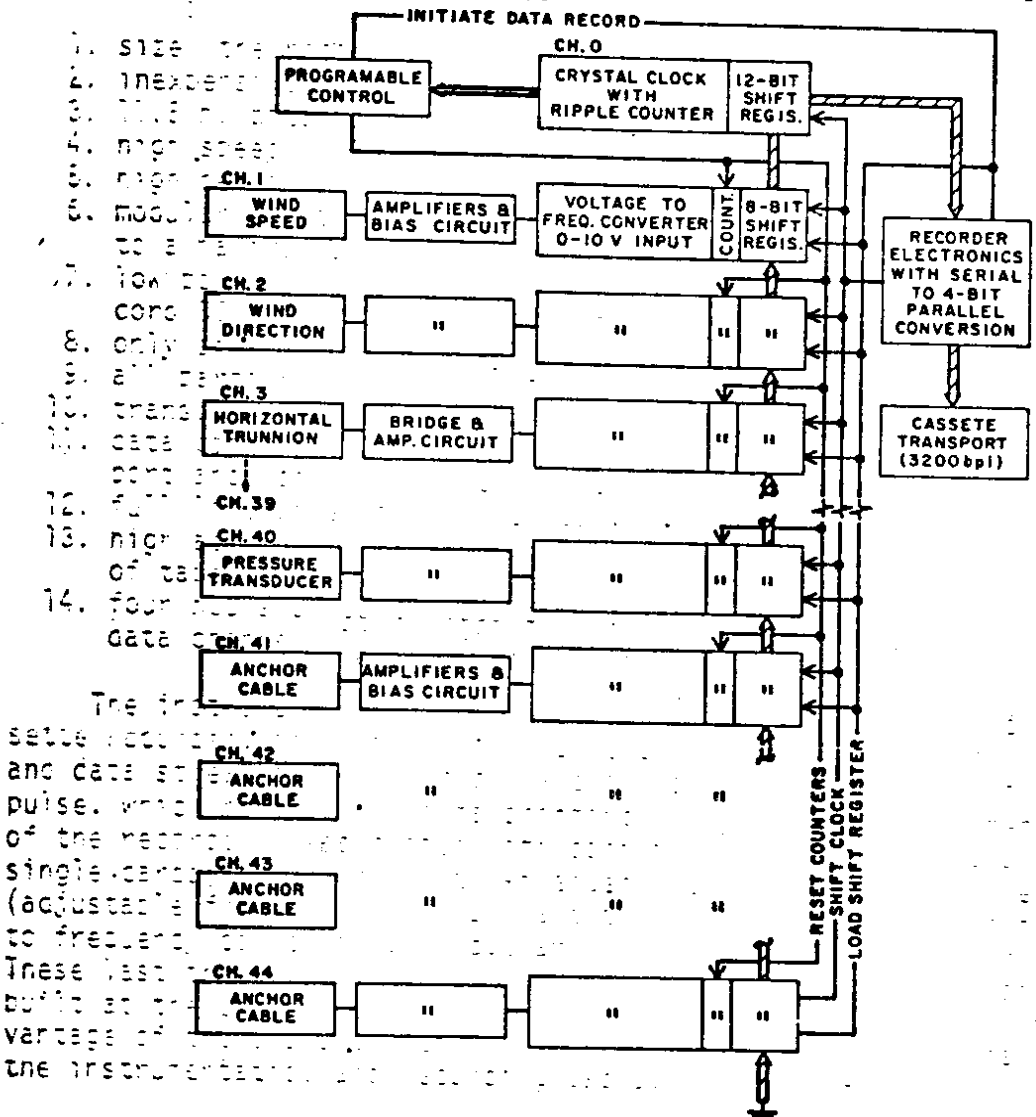


Figure 3 Instrumentation and Recording Package Layout

The next step is to a voltage to frequency converter which operates a zero to ten volt input to provide a 0 to 10,000 hertz output. The next card makes a frequency count which is stored in a shift register. All input channel signals are stored at the same time in their respective registers and then upon a clock signal are shifted in a serial fashion onto the tape. This means that all the shift registers for each input channel are wired together and the data are shifted, 4 bits at a time, from one register to the next, directly onto the 4 tracks of the cassette tape. The tape records 300 steps per second at a density of 800, 4-bit steps per inch. This operation enables addition or subtraction of input channels to be readily made. The maximum number of channels is limited by the stepping speed, shift register size and the time necessary to count the input frequencies.

The recorder system designed for this project has 44 8-bit input channels and a 12-bit clock channel. The 8-bit shift registers have a maximum count of 256, including the zero bit, which gives a resolution of 1/256 times the maximum output allowed in the calibration adjustment for each transducer. When run over scale, the registers recycle. Each data word is made up of a 5 step gap, 2 step preamble (where both are used by the cassette reader in tape conversion), 91 step data block (2 steps per 8-bit register times 44 inputs with an additional 3 steps for the clock) and a single step longitudinal character check. This allows a total of 99 4-bit steps per data sample (the recorder has 4 tracks or 4 bits are recorded for each 3.3 MS step of the recorder) and is the maximum allowable word length. The channel sampling rate is twice every second and two sampling modes are possible. In the continuous mode, a total of 4 hours of continuous data can be recorded on one 300' cassette. In the sequence mode, $x = 17$ minutes. Then, 2047 events are recorded at each start and a cassette holds 14 records. The sampling rate and sequence time (x) can be changed by alterations of the power control card.

The recorder may be operated manually or automatically under automatic control. It is initiated by the wind indicator reading a definite wind speed (20 mph). The wind speed is sampled for one minute before recording actually starts. This initiation procedure can be performed by any of the input transducers. If the wind speed is maintained at over 20 mph in the one minute pre-sample, then 2047 events are recorded in 17 minutes. The system then turns off and repeats the process 43 minutes later until the wind speed drops below 20 mph. The adjustments for the triggering and record period are made on the wind speed monitoring card.

Instrumentation

The recorder system previously described has 44 channels of 8 bits each, together with a 12-bit clock channel. These 44 channels were used as follows:

- 2 - wind speed and direction (W1, W2)
- 2 - wave pressure transducers (P1, P2)
- 4 - anchor cables (A1-A4)
- 18 - horizontal trunnions (1HL1-4HL1, 1HT1-4HT1, 3 and 4 HL2 3 and 4 HT2, 3HRL1-3HRL3, 3HRT1-3HRT3)

- | | |
|---|--|
| 12 - vertical trunnion anchorage rods | (1V1, 1V2, 2V1, 2V2, 3V1-3V4, 4V1-4V4) |
| 3 - center locks | (C1, C2, C3) |
| 1 - end lock | (L1) |
| 2 - support beams of vertical trunnions | (S1, S2) |

Figure 4 shows this arrangement with identification through the parenthetical symbols. The first eight channels listed record input data of wind velocity and wave force. The remainder measure strains on critical points of the drawspan mechanism.

The anemometers used (W1, W2) had a range of zero to 80 mph and were made by Weather Measure Corporation Model W121-5D. The wave pressure transducers (P1, P2) were from Viatron, Model PTB102G with a pressure range of zero to 15 psi. The final input was to determine anchor cable displacements (A1, A2, A3, A4) over a 20" gage. Figure 5 shows the arrangement where the change in gage length is recorded as a signal from the L.V.D.T.

The various strain gages were from Micro-Measurements Division of Vishay Intertechnology, Inc. The horizontal trunnions and end locks were serviced by CEA-06-125UR-350 rosettes; the tension on the center locks and anchorages was measured by EA-06-250TB-350 gages. Figure 6 shows a typical set-up for rosettes at a horizontal trunnion. The gages were located from the results of finite element analysis whereby positions with very small strain gradients could be ascertained.

Housing for the recording system was in an instrument shack located by the central tower on the southwest side of the drawspan. (Fig. 4)

Data Accumulation

The recording process produced digital data which were suited for immediate computer analysis. In this way, $f_i(k)$ in equation (16) could be obtained. Visual records were of interest and strip chart plots were assembled. Typical records are shown in Fig. 7. Hence, Fig. 7(a) gives the strain:time picture in the vertical trunnion anchors and 7(b) in the horizontal trunnions.

Discussion

The work described concerns the early stages of the maintenance study program for the Evergreen Point Bridge. The theoretical argument leads to a description of T_f , the life span of the element. The use of Miner's hypothesis allowed a simplification in the analysis. However, should another hypothesis show better agreement with results, then it can be included in much the same way. Such an hypothesis will be a function of n_i and N_i and hence, the novel theory leading to equation (14) will always be applicable for the n_i part. The prototype results N_i have to be generated in laboratory tests. In this work, it is proposed to determine the correlation between the structural and material values of N_i and hence, provide a correction to the material test data.

The determination of n_i was based on one season of strain reading.

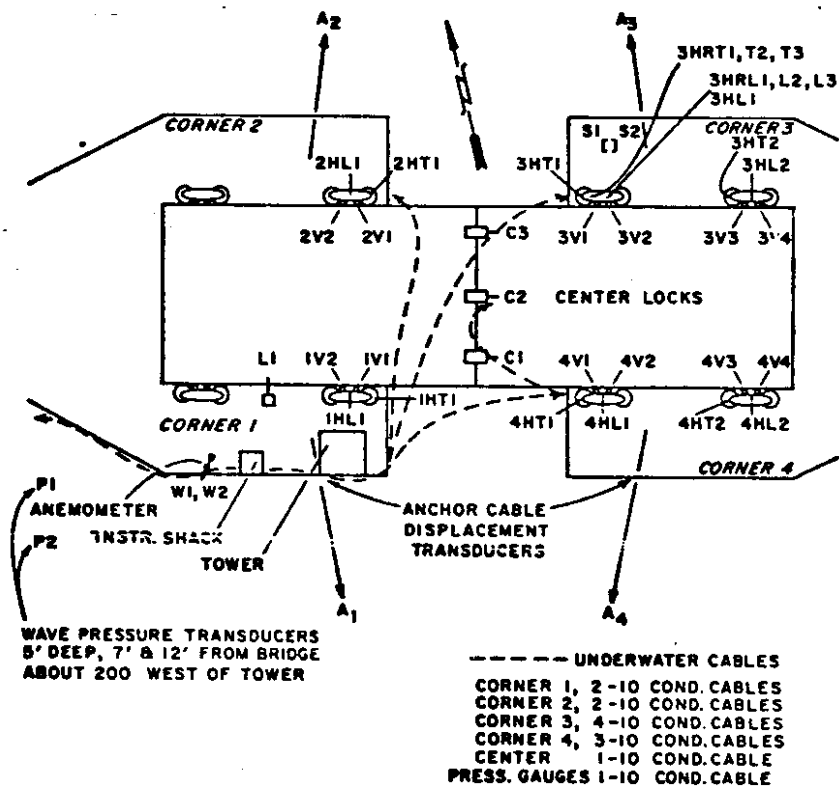


FIGURE 4 INSTRUMENTATION LAYOUT

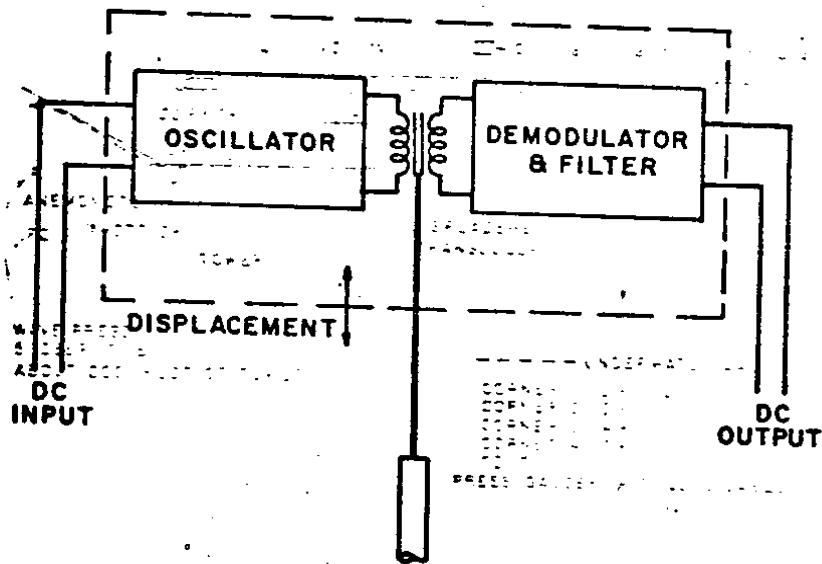
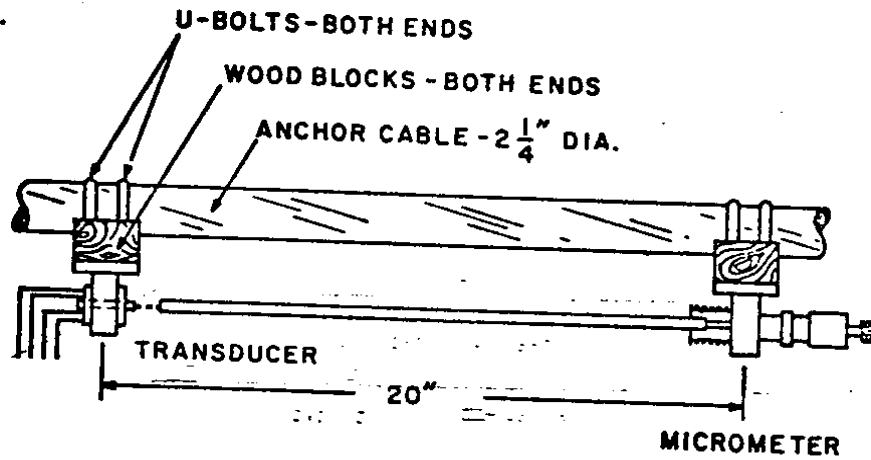


FIGURE 5 ANCHOR CABLE DISPLACEMENT TRANSDUCER

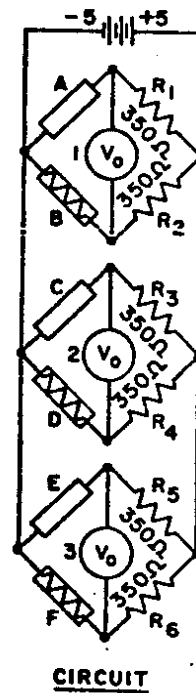
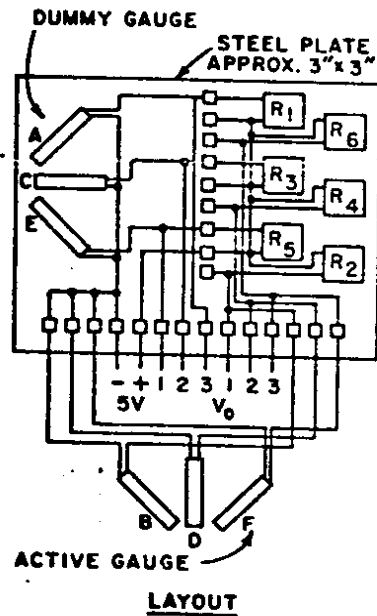
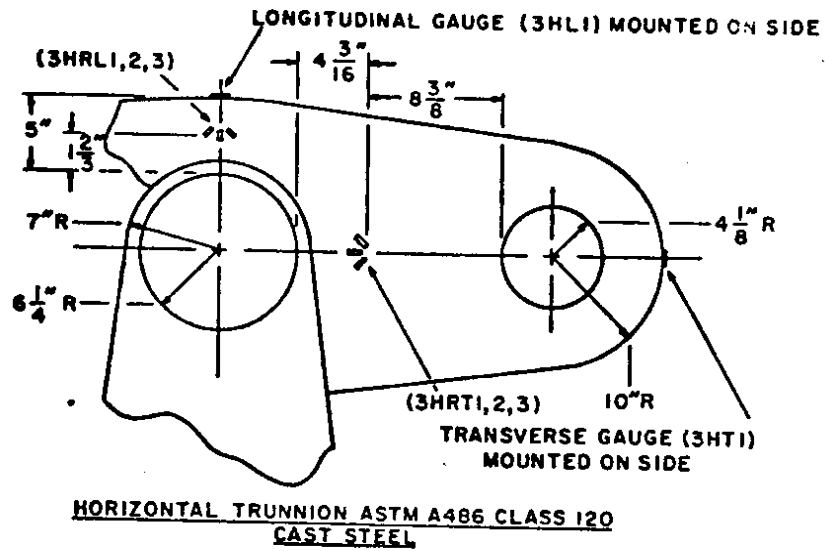


FIGURE 6 HORIZONTAL TRUNNION ROSETTE GAUGES

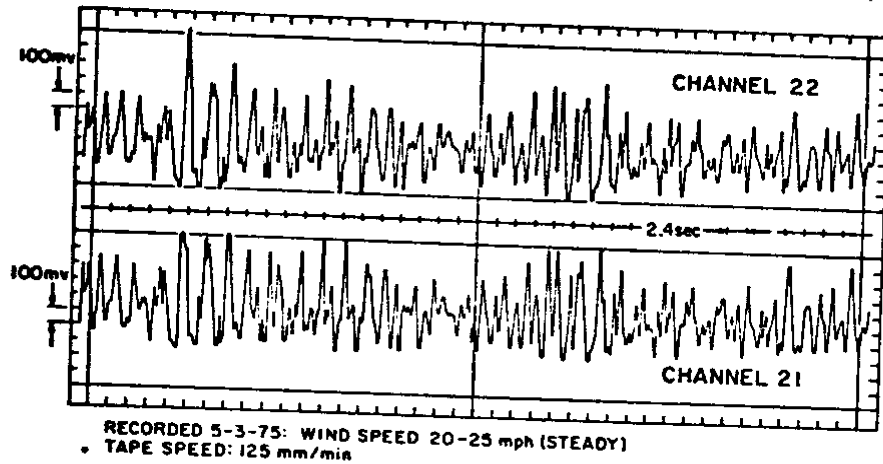


FIGURE 7(a) STRIP CHART OF STRAINS
 (VERTICAL TRUNNION ANCHORS)

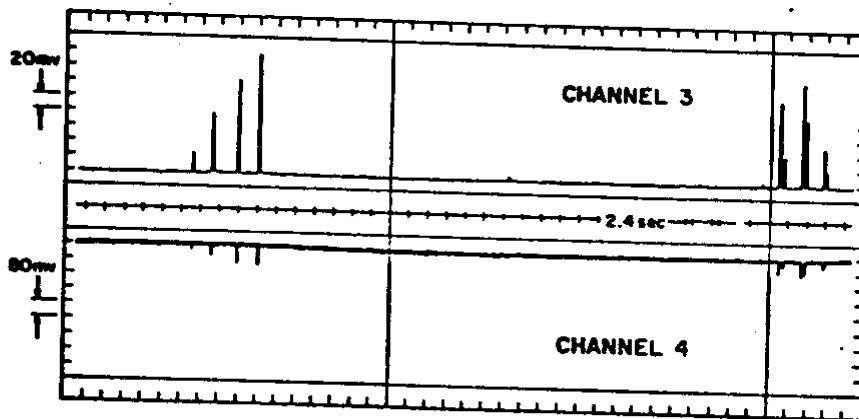


FIGURE 7(b) STRIP CHART OF STRAINS
 (VERTICAL TRUNNION ANCHORS)

It is realized that this can be generalized to fit into many seasons. Available are ten-year readings of wind velocity at the Evergreen Point Bridge site. This allows a probability distribution of wind speeds to be determined and the one season results take their place in that distribution. A study of the wind means versus standard deviation of strains is expected to provide a relationship between wind and strain so that long-term strain results can be predicted from the wind distribution. Thus, the range of $f_j(k)$ in (14) can be extended and T_f modified in equation (16).

The instrumentation and recording system described works efficiently. As data are accumulated, it becomes apparent that certain channels only provide confirmatory readings. For instance, the two gages on each vertical trunnion anchor rods need not be recorded separately but may be averaged before recording without loss of accuracy. This release of a channel will allow new strains to be measured and an extension of the wave pressure measurements to be made.

Although all of the instrumentation works well, one set of results causes concern. A comparison between the strain:time diagrams of Fig. 7(a) and 7(b) show very different forms. In Fig. 7(a), the signals from the vertical trunnion anchors have a continuous form well suited for analysis. All other results are of this form except those from the horizontal trunnion. Here, as in Fig. 7(b), strain spikes occur and the instrumentation and recording system is not suited to this intermittent signalling caused by wave battering. The 2 hertz sampling conceals the peak values of the intermittent recordings. Alternative recording methods have been introduced which holds the maximum value in each 1/2 second period.

Conclusion

The background for determining a maintenance program for the drawspan part of the floating Evergreen Point Bridge and the design of the system and the intentions with respect to the work have been described.

Acknowledgements

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Reference

1. Lin, Y. K., Probabilistic Theory of Structural Dynamics, McGraw-Hill, 1967, pp. 303 and 312.

APPENDIX B

PROGRAMS DEVELOPED IN 1975-76

- EGFBP - Initial tape conversion
Computes, lists and punches minimum, maximum,
mean and standard deviation.
Data stored on tape in original sampled form.
- SDTPR - Data re-arranged, improper data removed.
- DMFFT - Fast Fourier Transform coefficient computation.
Location of major peaks in raw spectra and
punching of values.


```

PROGRAM EGEPINPT,OUTPUT,PUNCH,TAP5=INPUT,TAPE=OUTPUT,
  LJAPT=PUNCH,TAPE1,TAPE2,TAPE3,TAPFIS)
PROGRAM TO READ BINARY DATA LOGGED CHARACTERS FROM 7-TRACK
TAPE (TAPE1,56 RPL,STRANGER) GENERATED USING THE WINDFIELD
FILE 4-TRACK CONVERTER.
COMPUTES AND WRITES ON TAPE(TAPE2,ECO,BPI, BINARY SCOPE).
THE WPC SAMPLE CORRESPONSE TO A SINGLE SAMPLE OF ALL THE INPUT
CHANNELS, WHILE A RECORD CONSISTS OF THE GROUP OF SAMPLES OBTAINED
EACH TIME THE RECORD IS TURNED ON AND OFF.
*****VARIABLES TO BE READ IN *****
C NCMRATIO - OUTPUT IDENTIFICATION
C NY - ARRAY CONTAINING NUMBER OF 4-BIT CASSETTE CHARACTERS PER
C RECORDED VALUE (INPUT)
C NVAL - THE NUMBER OF INPUT CHANNELS PER CASSETTE SAMPLE (OR
C RECORD)
C NPTOT - NUMBER OF CASSETTE RECORDS IN EACH TAPE RECORD (INPUT).
C NDATA - NUMBER OF CASSETTE SAMPLES/PCORD
C NSKIP - NUMBER OF 4-TRACK TAPE SAMPLES TO BE SKIPPED.
C NSKIP * IS - NUMBER OF 7-TRACK TAPE FILES TO BE SKIPPED.
C MUST = 0 - NO PRINTING OF RAW DATA, * J PRINTS RAW DATA
C *****VARIABLES SET IN DATA STATEMENTS *****
C PARI = .TRUE. - THIS VARIABLE IS USED IN THE SYSTEM S.K. ERRBIT
C (1,PARI) WHICH IMALES THE PROGRAM TO RECOVER
C FROM PARITY ERRORS.
C
C MW - WORD POSITION IN BUFFER ARRAY BUF(4C).
C NWORDS = LENGTH(I) - THE NUMBER OF C WORDS TRANSMITTED TO THE
C BUFFER ARRAY BUF( )
C NC = CHARACTER POSITION IN BUFFER ARRAY POSITION MW
C NREC - IS USED TO COUNT THE NUMBER OF CASSETTE RECORDS IN
C EACH 7-TRACK FILE. MUST INITIALLY BE SET TO A
C NUMBER .GT. NPECTY.
C *****APPAYS *****
C NX(NVAL) - DEFINED ABOVE
C NZ(NVAL) - DATA ARRAY CONTAINING THE ORIGINAL BINARY (INTEGER)
C VALUES RECORDED ON THE CASSETTE TAPE.
C Z(NVAL) - DATA ARRAY USE TO STORE THE CONVERTED DATA PTS.
C
C BUF(4C) - ARRAY USED BY BUFFER IN FOR READING THE 7-TRACK FILES
C *****MISC. VARIABLES *****
C NTYPE - PARAMETER DEFINING THE TYPE OF DATA RETURNED IN NZ( )
C = 1, ONE GOOD CASSETTE RECORD RETURNED (NO ERRORS)
C = 2, ONE ERROR CASSETTE RECORD IS RETURNED(CHECK PARITY
C ERROR WORDING CHECK)
C = 3, EOF (ENCOUNTERED, NO DATA RETURNED.
C NCHECK = PARITY/ERROR INTEGRY WORDS(4BITS) (OUTPUT)
C CO FLAG BIT IN PROFILE (COINCF)
C 01 EXCESS DATA ON CASSETTE RECORD
C 02 LOW SIGNAL LEVEL (OFF MUT)
C 04 COUNTER ERROR (NOT ENOUGH)
C 10 CASSETTE PARITY ERROR
C 76 7-TRACK RECORD DOES NOT CONTAIN EXPECTED
C NUMBER OF CHARACTERS
C 77 LAST CASSETTE RECORD IN 7-TRACK TAPE RECORD
C DOES NOT HAVE FLAG BIT
C 76/77 ARE ADDITIONAL TO THOSE PROVIDED BY THE TAPE

```

READER. COMBINATIONS OF THE FIRST 5 ERROR
MESSAGES CAN OCCUR.

C TAPE1 - INPUT TAPE
C TAPE2 - STOP ORIGINAL DATA, I, Z, N, CHECK - RFOUND BEFORE EACH REC
C TAPE3 - OUTPUT TAPE
C TAPE4 - STORE STATISTICS FOR ALL RECORDS
C NCH MPEC, NDATA, NBAD, NDIV, RANGE, TIME, I, IDVAR, XMAX, XMIN, XMEAN, SIDEV
3 COMMON/UNFEN/4, NWOPDS, NC, NREC, N940, IRR, TFI0ST, ITOT, NDATA, NVAL,
JNRECTOT, NTYPE, NCHECK, NCOM(F), NX(50), NZ(50), NK(100),
2BUF(40), ZN(50), AX(45), AM(45), AR(45), AC(45), NCHAN(45), KHAN(45)
3 COMMENT(1)
3 DATA PAPI, TPUE, /
3 DATA NV, NWOPDS, NC/41, 50, 0/
3 LOGICAL PAPI
3 WRITE(6, 55)
7 99 FORMAT(*FM POUNT NEW PIRRON PLEASE*)
15 READ(5, FCG) (NCOM(I), I=1, 8)
21 602 FORMAT(IJ, A5)
23 READ(5, 601) NVAL, NRECTOT
33 PRINT 100, (NCOM(I), I=1, 8), NVAL, NRECTOT
45 NPEC = NRECTOT + 3
47 MREC = 1
50 NX(I) = 3
51 DC 1, I = 2, 4, 5
53 1 NY(I) = 2
57 DO F I = 1, NVAL
60 8 KHAN(I) = I-1
64 REWIND 3
66 997 READ(5, 604) NDATA, NSKIP, NFKSKIP, MLIST
102 DO 4 I = 1, 100
104 NK(I) = 0
107 IFCRST = 0
110 DC 25, I = 1, 50
112 NZ(I) = 0
113 ZN(I) = 0.
117 REWIND 2
121 TELECF, 5) 995, 998
124 998 PRINT 126, MREC
132 PRINT 125, NDATA, NSKIP, NFKSKIP
144 MPEC = MPEC + 1
146 CALL ERBIT(1, PAPI)

C *****SKIP NFKSKIP FILES *****
G

150 NPAR = 0
191 7F(NFKSKIP, EC, 0) GO TO 334
192 DC 335 I = 1, NFKSKIP
194 397 BUFFER IN (1, I) (PUF(I), MUF(40))
191 398 CALL SFC(ND(MUF))
170 134 NPAR = NPAR + 1
172 11(NPAR, 15, 10) GO TO 397
174 STOP
176 330 CONTINUE

C *****SKIP NSKIP CASSETTE RECORDS.

```

201 334 IF(NSKIP.EQ.0)GC TO 333.
202   DO 910 I = 1,NSKIP
204   510 CALL TAPFD
210   333 REWIND 15
212   NBAD = 0
213   DO 2 I = 1,45
215     AV(I) = AR(I) + AS(I) = 0.
221     2 AP(I) = 5000.
224     DC 31 I = 1,NDATA
226     INCK = I
226     CALL TAPFD
227     DC 3 K = 1,NVAL
231     ZN(K) = NZ(K)
233     IF(NTYPE.NE.1)GC TO 3
235     AK(K) = AMIN(ZN(K),AR(K))
242     AY(K) = MAX(ZN(K),AR(K))
244     AS(K) = AR(K) + ZN(K)
250     AS(N) = AS(K) + ZN(K)*ZN(K)
254     3 CONTINUE
257     GC TO(40,41,R30),NTYFF
266     4C WRITE(2) I,(ZN(M),M=1,NVAL),NCHECK
303     GO TO 31
304     41 WRITE(1),I,(ZN(M),M=1,NVAL),NCHECK
321     N3AD = N3AD+1
323     AK(N3AD) = I
325     WTYF(2) I,(ZN(M),M=1,NVAL),NCHECK
342     31 CONTINUE
345     XNUM = NDATA - NBAD
347     DO 7 K = 1,NVAL
350     AS(K) = SQRT((AS(K)/(XNUM-1.))-((1./XNUM*(XNUM-1.))*A0(K)**2)))
365     7 AR(K) = AR(K)/XNUM
372     POINT 115,AX(1),AP(1),AR(1)

```

C ***** LIST ERROR CASSETTE RECORDS. *****

```

403 830 IF(NTYPE.GE.3.AND.I.LE.1)STOP
416 PRINT 108
422 PRINT 109,I,NBAD
432 IF(NBAD.FO.C)GC TO 10
433 REWIND 15
435 PRINT 110
441 DC 6 J = 1,NBAD
443 PEAD(15) J,(ZN(P),M=1,NVAL),NCHECK
460 PRINT 106, NCMCK,I,(ZN(M),M=1,20)
472 PRINT 306,(ZN(W),M=21,40)
500 9 PRINT 307,(ZN(M),M=41,NVAL)
516 10 TI = 1-131*AP(1)
520 PRINT 102,(CH,NDATA,T)
532 J1 = 2
534 J2 = 14
536 DC 5 L = 1,4
536 PRINT 111,(PHAN(K),K=J1,J2)
550 PRINT 112,(NCHAN(K),K=J1,J2)

```


1122 27X,15//1
1122 126 FORMAT(1H1,5X*RECCRD NO. *15//1)
1122 306 FORMAT(11X,20F6.0)
1122 307 FORMAT(12X,20F6.0)
1122 600 FORMAT(PA10)
1122 601 FORMAT(215)
1122 604 FORMAT(415)
1122 STOP
1124 END

SUBROUTINE TAPRO

```

C
C SUBROUTINE TO READ BINARY DATA FROM A 7-TRACK TAPE, TAPE1,
C WHICH WAS GENERATED BY PCL 4-TRACK-TO-7-TRACK CONVERTER.
C 7-TRACK TAPE RECORDS, 400 CHARACTERS MAXIMUM, ARE REFERRED IN
C AS NEEDED. EACH 7-TRACK TAPE RECORD MUST CONTAIN A WHOLE NUMBER
C OF 4-TRACK CASSETTE RECORDS. EACH RECORD MUST BE TERMINATED BY
C 1 PARITY CHARACTER AND 1 PARITY/ENDOP CHARACTER. (OTHERWISE
C THE LAST CASSETTE RECORD IS RETURNED AS AN ERROR RECORD).

```

```

2 COMMON/NE/N, NWORDS, NC, NREC, NREAD, IRP, IFIRST, IIDI, NDATA, NVAL,
   1 NRECTI, NTYPE, NCHECKS, NCM(E), NX(50), NZ(50), NK(100),
   2 BUF(40), ZN(50), AX(45), AM(45), AR(45), AS(45), NCHAR(45), KHAN(45)
   3 NPAF=0

```

```

C
C INITIALIZE DATA ARRAYS TO ZERO.

```

```

3 DO 500 I=1, NVAL
5   A7(I)=0
11  NREC=NREC+1 $ NCHECK=0

```

```

C
C READ NEW TAPE RECORD, IF NECESSARY.

```

```

13 IF (NREC.GT.NRECTI) 997,998
20 997 BUFFER IN (I,1) (BUF(I),RIHF(40))
25 998 CALL SECND(I)
27 IF (UNIT,1) 600,610,620,630
34 600 WRITE (6,101)
40 NPAR=NPAR+1
42 IF (NPAR.GE.10) 610,600
47 610 WRITE (6,102)
53 STOP
55 620 WRITE (6,100)
61 NTYPE=3 $ NREC=NRECTI
64 RETURN
64 610 NWORDS=LNGTH(I)
67   NM=NREC-1 $ NC=0

```

```

C
C UNPAC 1 CASSETTE RECORD.

```

```

71 598 DO 900 I=1, NVAL
73   JJ=NY(I)
75   DO 510 J=1, JJ
76     MC=NC+1 $ IF (MC.LE.10) GO TO 92C
102    NC=1 $ NW=NW+1
104    IF (NW.GT.NWORDS) GO TO 905
107 920 I1=(NC-1)*6+2 $ I2=I1+3
115   J1=59-(JJ-J1)*4+1 $ ICHECK=J1-2
123   CALL UNPAC (BUF(NW), ICMCP, ICHKCN, ICHKCK)
126   CALL PACTWO (I1, I2, BUF(NW), J1, N7(I))
133   IF (ICHECK.NE.0) GO TO 901
137   910 CONTINUE
      490 CONTINUE
C

```



```

141 NFLAG=0
142 NC=NC+1 IF (NC.LE.10) GO TO 930
146 NC=1 $ N1=N1+1 $ IF (N1.GT.N10PCS) GO TO 994
153 I1=(NC-1)*6+2 $ I2=I1+3 $ J1=56 $ ICHECK=I1-2 $ NCHECK=NP=0
164 CALL UNPAC (BLF(N1),ICHECK,ICHECK,NCFECK)
170 CALL PACTWO (I1,I2,BUF(N1),J1,N1)
174 NFLAG=NFLAG+1
176 IF (ICHECK.EQ.0) 930,940
202 940 NCHICK=NF
204 IF (NCHICK.NE.0).CP.NFLAG.NE.2) GO TO 993
212 NYTYP=1 $ RETURN
213 999 NYTYP=2 $ RETURN
215 994 NCFECK=770 $ NYTYP=2 $ RETURN
220 995 NCFECK=768 $ NYTYP=2 $ RETURN
223 991 NCFECK=NZ(I) $ NYTYP=2
226 101 FORMAT (10X,55H**PARITY ERROR ON TAPE 1, CONTINUE WITH NEXT RECDP
    *0***)
226 102 FCPMAT (34H**PARITY ERROR ON TAPE 1, STOP***)
226 100 FCPMAT (1H,10Y,14H**END FILE***)
226 RETURN
227 END

```

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PAGE UCJ

10 SUPROTIME PACTHO (I,J,A,M,B)
11 MI=HJ-I
12 CALL UNPAC(A,I,J,D)
15 CALL PAC(B,M,I,D)
23 PETLPN
24 END

EGOPEN //

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PAGE

PROGRAM SKIPR(INPUT,OUTPUT,TAP1,TAP2,INOUT,TAP3,OUTPUT,TAP4,TAP5)

PROGRAM TO MAKE FINAL TAPE CONVERSION ON FGPD TAPES

C

TAP1 = INPUT

C TAP5 = OUTPUT

C CHECK SET UP TO CONVERT FILES 345 FROM ER80

C CREF,CPAD,CO

C RESTART(TAP1,INVENT,3,)

C COPYR(TAP1,TAP2)

C UNLCPD(TAP1)

C RE*INPUT

C SKIPR(TAP2,17)

C COPYR(TAP,TAP2)

C RECU*ITAP,3,VS=0430, OUTPUT)

C LABEL

C PORTAN

C LGO

C REWIND(TAP,TAP3)

C SKIP(TAP2,1,17)

C SKIPR(TAP,4,17)

C COPYR(TAP,TAP2)

C PORTAN

C LGO

3 (CPM)/ON=7N(10),AM(45),AX(45),AP(65),7N(6),IFIECT,NNATA,PLU,

3 INVAL,MPAD,AS(45)

5 00 4 I = 10100

10 4 PK(I) =

12 00 25 I = 3,NVAL

16 20 7N(I) = 0.

17 CALL STAT

21 ENDFILE 3

23 STOP

END

```

2      SUPROUTINE STAT
COMMON/CMF/NK(100),AM(45),AY(45),AR(45),ZM(45),ZM(45),IFIRST,NDATA,NLV,
2      INVAL,MPAD,AS(45)
3      DIMENSION AL(2),Z(45)
4      IFIRST = 0
5      ICM = N = 1
6      RE=IND 2
7      DO 1, K = 1, 4
11     READ(2) MDEC, II, NLV, MPAD, NDATA, (NK(K), K=1, NRAD), AX, AM, AR, AS
44     IT = II
46     GO 2, J = 1, NDATA
47     APAD(2) = ZM(N), M=1, NLV)
61     Z(1,J) = ZM(N+1)
65     A(2,J) = ZM(N+1)
72     A(3,J) = ZM(N+2)
75     A(4,J) = ZM(N+3)
101    A(1,J) = ZM(N+4)
105    A(5,J) = ZM(N+5)
111    A(1,J) = ZM(N+6)
115    A(2,J) = ZM(N+7)
121    A(3,J) = ZM(N+8)
125    A(4,J) = ZM(N+9)
131    A(1,J) = ZM(N+10)
143    LE=IND 2
142    IF(NK(1).NE.0)CALL FORTI(A)
145    GO 6, I = 1, 11
147    WRITE(3) YCM, II, NDATA, (A(I), J), J=1, NDATA)
171    6 ICM = A + 1
175    I N = N + 11
200    PRINT 100, MDEC, II, NDATA, MPAD
213    100 FORMAT(I4, I4, Y4, 6D9 NUMBER+11G/10Y+TIME+OY, I10/
      AX, NUMBER OF SAMPLES/I10X, NUMBER OF RAD PTS, *I7/
      PLX, LOCATIONS OF RAD DATA POINTS*/
213    PRINT 101, (NK(K), K=1, NRAD)
226    FORMAT(20I5)
228    RETURN
227    END

```

```

3      SUBROUTINE F011(A)
      COMMON/NE/NK(1),A(45),AX(45),AP(45),Z(45),IFIRST,NDATA,NIV,

```

```

      INVAL,NRAD,AN(45)
      DIMENSION A(11,2048)

```

```

      C      IFIRST = NO. OF RAD POINTS AT THE BEGINNING OF A RECORD.
      C      THIS ROUTINE LINEARLY INTERPOLATES ACCROSS ALL RAD DATA POINTS
      C      THAT ARE INDICATED AS SUCH BY THE TAPE HEADER.

```

```

      DO 14 J4 = 1,11
      IJOT = 0

```

```

      IF (NK(1).N(1)GO TO 3
      J4 = 4

```

```

      J1 = J1 + 1
      IF (11.GT.100)RETURN

```

```

      IF (NK(11).EQ.1)GO TO 1
      XCH = A(IH,11)

```

```

      DO 4 I = 1,11
      4 A(IH,I) = XCH

```

```

      IFIRST = J1 - 1
      3 12 = 11

```

```

      5 11 = 11+1
      6 15 = 11

```

```

      7 IF (11.GT.NDATA,OR.12.GT.100)RETURN
      IF (11.NE.NDATA)GO TO 5

```

```

      A(IH,11) = A(IH,(11-1))
      GO TO 13

```

```

      9 J10A = N
      10 11 = 11+1

```

```

      11 14 = 12
      12 12 = 12+1

```

```

      13 J10B = 1104 + 1
      14 IF (110A.GE.1)J10T = 0

```

```

      15 IF (110A.GE.200,OR.12.GT.100)RETURN
      IF (NK(12).GE.NDATA)A(IH,11) = A(IH,13-1)

```

```

      16 IF (NK(12).EQ.1)GO TO 12
      IF (NK(12).EQ.2)GO TO 12

```

```

      17 IF (NK(12).EQ.3)GO TO 17
      18 XSO = 11-13+1

```

```

      19 XH = (A(IH,13-1)-A(IH,11))/XSO
      20 15 = 11-1

```

```

      21 DO 22 I = 13,15
      22 A(IH,I) = A(IH,I-1) - XDX

```

```

      23 GO TO 7
      24 14 CONTINUE

```

```

      25 13 RETURN
      26 END

```

DIFFRA //

RUN VERSION FEB 74-B 00:04.08/04/76

PAGE 001

PROGRAM DFFF(INPUT,OUTPUT,PUNCH,TAPE5=INPUT,TAPE6=OUTPUT,TAPE7=PU
NCH,TAPE1,TAPE2)

C REQUEST(TAPE,VSIN=K30,E,INPUT)

C SKIP(TAPE,1,17)

C COPY(TAPE,TAPE1)

C UNLOAD(TAPE)

C REWIND(TAPE1)

C FURTKAN.

C LGO.

C KEWIND(TAPE2)

C REQUEST(TAPE,VSIN=K30,N,OUTPUT)

C LABEL(TAPE,NAL=CHRISTENSEN)

C COPY(TAPE2,TAP)

C PROGRAM TO EDIT DATA, COMPUTE AND LIST STATISTICS, APPLY

C DATA WINDOW AND COMPUTE AND STORE FFT COEF. ON TAPE2 AND TO

C LOCATE AND LIST PEAK VALUES, FIND LOCATIONS IN SPECTRUM.

C COMMON/BLK/NY,NB,NK,N1,N2,IFO,ITM,IMA,IWA(10),KXAN(45),

C *U,PIY,AX(45),A(45),AB(45),AS(45),ASA(45),PK(30),LK(350)

C COMMON A(1)

C COMPLEX AD

C NCHAN = ARRAY OF CHANNEL NAMES.

C IFO NUMBER OF COEF. SET TO ZERO AT BEGINNING OF SPECTRA.

C ITM NUMBER OF DIFFERENT SUMS IN BLKSM.

C AWA() ARRAY OF SUMS TO BE APPLIED.

C

3 READ ZOC,NCHAN

11 200 FURMAT(16A5)

11 READ ZCL,IFO,ITM,IMA,ICL

25 201 FURMAT(21B,2J12,1)

25 IF(ILL.EQ.C)ICL=45

27 PRINT IFO,IFO,ITM,IWA

41 100 FURMAT(1H,10X,SUMMARY OF STATISTICAL DATA FOR EGF8P//15X*IFO*2X*

11TM*2A*IWA//13A,1Z15//1

41 PIY = ACOS(-1.0)

44 DO 20 I = 1,45

45 20 NCHAN(I) = I-1

51 DC B I = 1,4100

52 8 A(I) = 0.0

55 DE 1-1,71024,

57 DC 1 IM = 2,ICL

60 READ(1) ICH,IT,NOATA,(A(J),J=1,NOATA)

100 IF(IM.LE.3IGJ TO 1

103 DO 10 K = NOATA,5036

105 10 A(K) = 0.0

110 NY = NJATA

112 PRINT IOL,ICH,NY

121 101 FURMAT(13X,C4,12, MAY,9X*MIN,9X*MEAN*7X*STDEV,10X,110)

121 CALL FFVAL

122 IFS(1M),LGO,01GU TO 12

124 NY = 2046-NOATA

126 PRINT,LL,01GU TO 11

127 DO 2 J = NOATA,2058

```

131 2 A(J) = AB(IH)
135 11 NY = 2048
136 CALL MEVAL
137 DC 21 J = 1,3
141 21 A(J) = AB(IH)
145 IU = NDATA-3
147 DU 22 J = NU, NDATA
150 22 A(J) = AB(IH)
155 CALL MEVAL
156 DC 7 J = 1, 2048
160 7 A(J) = A(J) - AB(IH)
165 CALL DATMIN
166 CALL FEI(-1.0, 11, 0)
171 NI = NY/2
173 DU 3 J = 1, NI
174 3 A(NI+J) = A(NY+J)
202 IF((JF*.EQ.O)OU TO 12
203 DU 5 J = 1, IFO
204 5 A(J) = A(J+NI) + 0.0
212 12 RITE(2) (A(1), I=1, 2048)
217 IF(AS(.H).EQ.O.O)GO TO 1
221 DU 4 J = 1, NI
222 XU = CMPLX(A(J), A(J+NI))
227 4 A(J) = (CAOS(XU)+2)*(U/LOAT(NY))
247 DU 6 J = 1, ITH
250 NB = IWA(J)
252 IF(NB.GT.1)I3=14
257 13 NI = 1025
260 N2 = 1024 + (2048/(NB+NB))
265 CALL BLNSM
266 GU TO 12
267 14 NI = 1
270 N2 = 1024
271 15 CALL PKLUC
272 6 CALL ARASP
276 PUNCH 140, NK
303 ( PUNCH 141, (PK(K), K=1, NK)
314 PUNCH 142, (LK(K), K=1, NK)
331 1 CONTINUE
334 ENDFILE 2
335 READ 202, NCDM
344 202 FORMAT(A10)
344 PRINT 130, NCDM
352 130 FORMAT(1H1//17X+SUMMARY OF STATISTICAL DATA FOR *A10//)
352 J1 = 2
353 J2 = 12
354 GO 31 IT = 1, 4
356 PRINT 431, (KHAN(K), K=J1, J2)
370 PRINT 132, (INCHAN(A), K=J1, J2)
401 PRINT 133, (AX(K), K=J1, J2)
414 PRINT 134, (AM(K), K=J1, J2)
431 PRINT 135, (AB(K), K=J1, J2)
444 PRINT 136, (AS(K), K=J1, J2)
457 PRINT 137, (ASA(K), K=J1, J2)
472 J1 = J1+1
474 31 J2 = J2+1

```

477 131 FORMAT(RX,CH,11(19,1X))
 477 132 FORMAT(9A,NAME,11(4X,A5,1X))
 477 133 FORMAT(9A,MAX,11(F10.0))
 477 134 FORMAT(9A,MIN,11(F10.0))
 477 135 FORMAT(9A,PEAN,11(F10.0))
 477 136 FORMAT(9A,STDEV,9.2,10(F10.2))
 477 137 FORMAT(9A,SIDEV,9.2,10(F10.2))
 477 140 FORMAT(15)
 477 141 FORMAT(0E10.0)
 477 142 FORMAT(20I4)
 477 S ICP
 501 FND


```

SUBROUTINE McVAL
COMMON/BLK1/NY,N3,NK,NL,N2,IEO,ITM,JE,IWA(10),KMAN(45),NCHAN(45),
*U,PIY,AX(45),AM(45),AB(45),AS(45),ASA(45),PK(350),LK(350)
COMMON A(1)
AS(IH) = A(I)*A(I)
AX(ID) = AX(IH) = AB(IH) = A(I)
DO 1 J = 2,NY
AX(IH) = AMAX1(A(J),AX(IH))
AM(IH) = AMIN1(A(J),AM(IH))
AB(IH) = AB(IH)+A(J)
1 AS(IH) = A(J)*A(J) + AS(IH)
XN = NY
45(IH) = SQR((AS(IH)/(XN-1.))-((1./(XN*(XN-1.)))*(AB(IH)*#2)))
AB(IM) = AB(IH)/XN
56 PRINT 100,AX(IH),AM(IH),AB(IH),AS(IH)
71 100 FORMAT(5E12.4)
71 RETURN
72 END

```

```
2 SUBROUTINE DATWIN  
COMMON/BLK1/NY,NB,NK,N1,N2,IE9,IIH2,IH2,IWA(10),KHAM(45),NCHAN(45),  
*U,PIY,AK(45),AM(45),AB(45),AS(45),ASA(45),PA(350),LK(350)  
COMMON A(1)  
U = 0.0  
3 NCS = NY/10  
6 CNS = NCS  
7 XN = 0.0  
10 DO 1 I = 1,NY  
12 WX = 1.0  
14 IF(1.LE.NCS)WX = (.2*(1.-CNS(PIY*XN/CNS)))  
25 XE = NY-1  
30 IF(1.GT.NY-NCS)WX = (.5*(1.-CNS(PIY*XM/CNS)))  
41 A(I) = WX+A(I)  
44 XN = XN+1  
46 WA = WX+WX  
47 I U = U+WX  
53 U = FLDAT(NY)/U  
55 RETURN  
55 END
```

RUN VERSION FEB 74 8 00:04 UR/04/76

6 SUBROUTINE FFT1(SIGN,N,JX)
COMMON/BLK_/NY,NB,NK,N1,N2,IFG,ITM,LIH,IWA(10),KXHAN(45),NCHAN(45),
*UPIY,AA(45),AM(45),AB(45),AS(45),ASA(45),PK(350),LK(350)

6 CUMMON ALL)
6 NMAX=LARGEST VALUE OF N TO BE PROCESSED
6 NUNDMAT,DIMENSION D(NMAX)
6 FOR EXAMPLE (IF NMAX=25 THEN
6 DIMENSION A(2**N)
6 DIMENSION R(16)
6 COMPLEX WNY,CP
6 LX=2**N
6 DU 1 I=1,N
11 M(I)=2**(N-I)
12 DU 4 L=1,N
21 NBLOCK=2**(L-1)
22 LBLOCK=LX/NBLOCK
27 LHALF=LBLOCK/2
32 K=V
33 DU 4 I=1,NBLOCK
34 FK=K
35 FLA=LX
37 V=SIGN*(2*1453**K/FLX
40 W=CHPLX(CUS(V)/SIN(V))
44 JSTART=LBLOCK*(IBLOCK-1)
52 DU 2 I=1,LBLOCK
55 J=I*START+1
60 JH=J+LHALF
62 V = *C*PLX(A(JH+JX),A(JH+LX+JX))
64 A(JH+JX) = A(J+JX)-KEAL(O)
67 A(JH+LX+JX) = A(J+LX+JX)+AIMAG(O)
105 A(J+JX) = A(J+JX)+KFAL(U)
115 A(J+LX+JX) = A(J+LX+JX)+AIMAG(O)
120 2 CONTINUE
125 UC 3 I=2,N
127 I=I
131 IF (K.LI.M(I)) GO TO 4
134 3 K=N-M(I)
137 4 N=N+M(I)
146 K=O
146 DU 7 J=1,LX
146 IF (K.LI.O) GO TO 5
150 HULUR = A(J+JX)
152 HULDI = A(J+LX+JX)
154 A(J+JX) = A(K+1+JX)
157 A(J+LX+JX) = A(LX+K+1+JX)
162 A(K+1+JX) = HULUR
167 A(LX+K+1+JX) = HULDI
171 5 UC 6 I=1,N
174 I=I
176 IF (K.LT.M(I)) GO TO 7
201 6 K=N-M(I)
204 7 N=N+M(I)
211 IF (SIGN.LT.O.O) GO TO 28
212 V=V*I
214 A(I+JX) = A(I+JX)/FLX

3
RUN VERSION FEB 75 8 06:05 08/J4/76

PAGE 002

217 9 A(I+LX+JX) = A(I+LX+JX)/EIX

225 28 CONTINUE

226 RETURN

END

RUN VERSION FEB 74 B 00104_V8/J4/76

```

SUBROUTINE BLKSF
  C(LRN)/BLK1/NY/NB,NK,N1,N2,IFO,ITH,ZHJ,WA(10),KHAN(45),NCHAN(42),
  *U,PIY,AX(45),AM(45),AB(45),AS(45),ASA(45),PK(350),LK(350)
  CUPRON A(1)
  DC 1 I = N1,N2
  1 A(1) = 0.0
  10 IS = N1-1
  12 M = 0
  13 2 IS = IS+1
  15 IYB = 0
  16 3 M = M+1
  20 IAB = JXB+1
  21 A(1S) = A(1S)+A(M)
  24 IF(M.GE.NY)GO TO 4
  26 IF(IYB.GE.NB)GO TO 2
  31 GO TO 3
  31 4 CONTINUE
  31 XAB = NB
  33 5 I = N1,N2
  35 A(1) = A(1)/XAB
  42 RETURN
  42 END

```

```

2 SUBROUTINE PKLOC
COMMON/BLK1/NY,NU,NK,N1,N2,IFQ,IIM,IH,IWA(10),KHAN(45),NCHAN(45),
*J,PLY,AX(45),AM(45),AB(45),AS(45),ASA(45),PK(350),LK(350)
2 DIMENSION XK(350)
2 I = N1-1
4 A(N1) = A(N2+1) = J.0
7 NK = 0
10 N3 = N1+1
11 LS = 1
12 CX = A(N1)
13 DO 1 K=1,N2
15 CI = A(K)
17 CA = AMAX1(CI,CX)
22 1 IF(CX.EV.CI)LS = K
30 CX5 = 0.C5*CX
31 XS = 1024./FLOAT(LS)
34 PRINT 102,CX,XS
43 102 FORMAT(2X,CX = *E12.3,10X*LS = *F10.2)
44 NK = 0
44 3 I = I+1
46 IF(I.GT.N2)GO TO 5
51 IF(A(I+1).LE.A(I))2,3
55 2 IF(A(I).LE.CX5)GO TO 4
61 NK = NK+1
63 PK(NK) = A(I)
65 LK(NK) = I
67 4 I = I+1
71 IF(I.GT.N2)GO TO 5
74 IF(A(I+1).GE.A(I))3,4
101 5 CALL SCALK(XK)
103 16 N = NK
105 NK = I = 0
106 PA(N+1) = 0.0
110 13 I = I+1
112 IF(I.GT.N2)GO TO 15
115 IF(PK(I+1).LE.PK(I))12,13
122 12 NK = NK+1
124 PRINTK = PK(I)
126 LK(NK) = LK(I)
130 14 I = I+1
132 IF(I.GE.N2)GO TO 15
134 IF(PK(I+1).GE.PK(I))13,14
142 15 PRINT 100,(PK(J),J=1,NK)
155 CALL SCALK(XK)
157 PRINT 101,(LK(J),J=1,NK)
172 IF(NK.GT.5)GO TO 16
176 100 FORMAT(1A*PK*10(10.2)
176 101 FORMAT(1A*LK*10F10.2)
176 RETURN
175 END

```

```

3      SUBROUTINE SCALK(XK)
      COMMON/BLK/ NY, NB, NK, NI, N2, IFO, JIM, JH, JWA, IQ, NCHAN(45), NCHAN(45),
      *U, PI, AX(45), AM(45), AB(45), AS(45), ASA(45), PK(350), LK(350)
      COMMON A(I)
      DIMENSION XK(350)
      SB = 0.0
      IF(NB.GT.1)SB = 1024.
      DO 1 I = 1, NK
      1  XK(I) = 1024./((LK(I)-SB)*NB)
      RETURN
      END

```

2 SUBROUTINE ARASP
COMMON/BLK1/NY,AB,NK,NI,N2,JEQ,IIM,IH,IWA(10),NHAN(45),NCHAN(45),
*U,PAY,AX(45),AH(45),AB(45),AS(45),ASA(45),PK(350),LK(350)
2 COMMON A(1)
2 ASA(IH) = 0.0
4 UO.L.I. = NI/NZ
6 1 ASA(IH) = ASA(IH) + A(1)
13 ASA(IH) = SORI(ASA(IH)*ELOAI(NR)/1024.0,1)
22 RETURN
23 END

APPENDIX C

STATISTICS FROM TAPES E921-33

SUMMARY OF STATISTICAL DATA FOR FC 21 - 1
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPF 0
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - SECONDS

CH. NAME	1 (MPH)	2 W2 PFC	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	21.90	206.37	48.02	1.80	27.44	3.60	20.58	9.00	27.44	1.60	5.40
MIN.	14.36	.00	-10.20	-.60	-3.43	-4.90	-20.56	-23.40	-3.43	-.90	-.90
MEAN	20.42	169.49	250.30	12.60	157.78	71.10	336.14	197.10	196.94	52.20	57.60
STDEV	3.900	25.670	6.635	.459	2.217	1.250	5.743	2.557	2.645	.585	.659

CH. NAME	12 3PRL2 (MS)	13 34FL3 (MS)	14 3PRT1 (MS)	15 3PRT2 (MS)	16 3PRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	9.00	22.50	1.80	2.70	24.01	7.20	27.44	1.80	63.79	139.65
MIN.	.00	-28.80	-2.70	-.90	-2.70	-6.86	-34.20	-3.43	-.90	-37.24	-43.79
MEAN	.00	126.20	46.80	59.40	54.50	240.10	162.00	192.06	114.30	726.18	1005.46
STDEV	.000	2.812	2.462	.451	1.038	2.551	2.306	2.681	.428	16.047	31.703

CH. NAME	23 2V1 (PS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (PS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	46.55	111.72	93.10	83.79	55.86	.00	74.48	74.48	55.86	55.86	3.48
MIN.	-53.10	-37.24	-37.24	-37.24	-18.62	.00	-27.53	-37.24	-18.62	-18.62	-2.32
MEAN	707.56	707.56	530.67	427.57	586.53	.00	614.46	623.77	586.53	614.46	141.52
STDEV	14.573	10.164	17.620	16.879	6.505	.000	15.441	15.621	11.160	9.672	1.525

CH. NAME	34 C2 (MS)	35 C3 (PS)	36 L1 (MS)	37 S1 (MS)	38 S2 (PS)	39 P1 (PSI)	40 P2 (PSI)	41 TOMS	42 A2 TOMS	43 TOMS	44 A4 TOMS
MAX.	3.48	4.64	.00	10.29	13.72	.10	.08	.00	.00	.00	.00
MIN.	-2.32	-4.64	.00	-13.72	-13.72	-.14	-.10	.00	.00	.00	.00
MEAN	122.96	132.24	.00	373.67	380.73	1.46	.86	.00	.00	.00	.00
STDEV	1.012	1.761	.000	3.213	3.792	.040	.025	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR PG 22 - 1
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 3
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STPAIRS

CH.	1	2	3	4	5	6	7	8	9	10	11
NAME	L1	W2	14L1	1HT1	2HT1	3HT1	3HL1	3HT1	3HL2	3HT2	3HL1
	(MPH)	(EG)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	31.26	169.49	78.86	.00	65.17	2.70	34.26	5.40	51.45	1.80	13.50
MIN.	18.82	9.57	-10.25	.00	-3.43	-11.70	-37.73	-33.30	-3.43	-1.80	-1.86
MEAN	24.44	139.58	132.08	.00	150.52	51.30	243.53	165.86	192.08	48.60	36.90
STDEV	2.281	15.418	14.722	.000	6.669	.683	4.743	1.731	5.278	.532	1.413

CH.	12	13	14	15	16	17	18	19	20	21	22
NAME	3HS(2)	3HP(3)	3HT(1)	3HT(2)	3HT(3)	4HL1	4HT1	4HT(2)	4HT(2)	1V1	1V2
	(PS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	.00	.00	11.70	4.50	.50	65.17	6.30	.00	.00	148.96	251.37
MIN.	.00	.00	-1.80	.00	.00	-6.86	-40.50	.00	.00	-55.86	-121.03
MEAN	.00	.00	63.90	30.60	113.40	226.38	150.30	.00	.00	716.87	930.66
STDEV	.000	.000	.752	.524	.438	6.350	1.726	.000	.000	23.183	37.355

CH.	23	24	25	26	27	28	29	30	31	32	33
NAME	2V1	2V2	2V1	2V2	2V3	3V4	4V1	4V2	4V3	4V4	4V1
	(MS)	(MS)	(MS)	(PS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	37.24	148.96	130.34	130.34	74.48	74.48	53.10	102.41	55.86	55.86	5.80
MIN.	-152.27	-46.55	-37.24	-37.24	-18.62	-5.31	-46.55	-37.24	-18.62	-18.62	-4.64
MEAN	735.49	670.32	512.05	418.05	577.22	46.55	595.64	595.64	586.53	614.46	140.36
STDEV	22.410	23.607	20.173	20.615	11.436	10.772	18.527	18.764	11.853	10.145	1.956

CH.	34	35	36	37	38	39	40	41	42	43	44
NAME	F2	C3	L1	S1	S2	F1	P2	A1	A2	A3	A4
	(MS)	(MS)	(MS)	(MS)	(MS)	(PSI)	(PSI)	TONS	TONS	TONS	TONS
MAX.	3.48	4.64	.00	10.29	27.44	.14	.10	.00	.00	.00	.00
MIN.	-4.64	-5.50	.00	-10.29	-24.01	-2.23	-.19	.00	.00	.00	.00
MEAN	5.12	119.48	.00	370.44	384.16	1.56	.54	.00	.00	.00	.00
STDEV	1.069	1.719	.000	3.640	5.041	.046	.032	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FC 22 - 2
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 39
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 W2 (MS)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HLL1 (MS)
MAX.	31.26	189.43	503.35	.00	154.35	67.20	531.65	43.20	75.46	45.10	37.00
MIN.	16.91	19.04	-274.40	.00	-10.29	-16.20	-44.59	-33.30	-10.29	-6.30	-6.30
MEAN	24.24	190.52	277.83	.00	161.21	61.20	277.83	171.00	158.54	54.00	42.30
STDEV	2.510	18.280	200.768	.000	15.226	5.539	44.487	6.784	8.420	11.129	6.169

CH. NAME	12 3HR12 (MS)	13 3HRL3 (MS)	14 3HRT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4PL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	.00	.00	90.10	53.10	.90	411.60	65.70	.00	.00	260.68	744.80
MIN.	.00	.00	-5.40	-9.00	-60	-20.58	-9.10	.00	.00	-93.10	-223.44
MEAN	.00	.00	69.30	39.60	113.40	246.96	155.70	.00	.00	754.11	1107.89
STDEV	.000	.000	7.291	8.545	5.528	35.514	7.602	.000	.000	76.563	236.008

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 2V1 (MS)	26 2V2 (MS)	27 2V3 (MS)	28 2V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	37.24	148.96	148.96	148.96	74.48	83.79	156.27	148.96	102.41	102.41	8.12
MIN.	-148.96	-48.55	-37.24	-48.55	-18.62	-18.62	-46.55	-46.55	-27.93	-18.62	-4.64
MEAN	735.49	679.63	512.05	418.65	577.22	55.86	595.84	605.15	566.53	614.46	142.68
STDEV	28.315	29.257	24.231	24.446	14.620	13.874	24.909	25.117	16.459	13.701	1.870

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	9.28	4.12	.00	10.29	30.87	.15	.14	.00	.00	.00	.00
MIN.	-10.44	-4.64	.00	-13.72	-34.30	-22	-17	.00	.00	.00	.00
MEAN	87.00	120.64	.00	370.44	397.59	1.68	1.06	.00	.00	.00	.00
STDEV	2.750	1.800	.000	4.610	6.707	.048	.039	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 22 - 3
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 40
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 11 (MPH)	2 W2 (EG)	3 1HL1 (MS)	4 1MT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HT2 (MS)	10 3HT2 (MS)	11 3HL1 (MS)
MAX.	33.74	179.46	198.64	.00	190.34	44.10	106.33	9.00	113.19	5.40	41.40
MIN.	20.74	.00	-17.15	.00	-6.86	-11.70	-34.30	-33.30	-6.86	-1.60	-1.60
MEAN	27.12	129.61	188.65	.00	157.78	58.53	274.40	166.30	198.94	50.40	40.50
STDEV	2.694	38.832	24.657	.000	15.645	1.264	6.453	1.445	10.642	.820	3.341

CH. NAME	12 3HP12 (MS)	13 3HP13 (MS)	14 3HRT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	.00	39.60	21.60	1.60	205.80	45.90	.00	.00	204.82	416.95
MIN.	.00	.00	-2.70	-1.80	-0.90	-10.29	-41.40	.00	.00	-65.17	-139.65
MEAN	.00	.00	-65.70	36.00	113.40	240.10	153.90	.00	.00	720.18	1005.48
STDEV	.000	.000	2.258	1.539	.481	16.938	2.686	.000	.000	39.942	76.676

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	55.86	232.75	223.44	214.13	111.72	121.03	214.13	214.13	139.65	130.34	4.12
MIN.	-232.75	-65.17	-37.24	-55.86	-27.93	-27.93	-55.86	-46.95	-37.24	-37.24	-4.64
MEAN	726.18	679.63	512.05	419.65	586.53	55.86	609.15	605.15	586.53	614.46	140.36
STDEV	39.274	40.751	31.580	31.208	18.643	17.992	31.920	31.630	20.717	16.026	1.952

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (PSI)	38 S2 (MS)	39 F1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TENS	43 A3 TONS	44 A4 TONS
MAX.	9.28	10.44	.00	6.86	34.30	.14	.14	.00	.00	.00	.00
MIN.	-4.64	-6.56	.00	-24.01	-41.16	-0.22	-0.25	.00	.00	.00	.00
MEAN	80.32	121.80	.00	373.87	327.59	1.68	1.65	.00	.00	.00	.00
STDEV	1.784	3.819	.000	5.053	8.531	.046	.046	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 22 - 4
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 41
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SURFACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH.	1	2	3	4	5	6	7	8	9	10	11
NAPE	VI	W2	3HL1	3HT1	2HL1	2HT1	3HL1	3HT1	3HL2	3HT2	3HL1
	(MPH)	(CFG.)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	37.64	179.46	291.55	.00	270.97	9.00	168.07	11.70	140.63	11.70	68.30
MIN.	20.42	4.57	-34.30	.00	-24.01	-10.80	-24.01	-27.90	-17.15	-2.70	-3.60
MEAN	29.99	149.55	198.64	.00	174.93	51.50	277.83	169.20	205.80	51.30	40.50
STDEV	3.050	18.422	46.257	.000	41.626	1.458	17.812	2.273	23.499	1.986	7.256

CH.	12	13	14	15	16	17	18	19	20	21	22
NAPE	3HL2	3HE13	3HE11	3HT2	3HPT3	4HL1	4HT1	4HL2	4HT2	1V1	1V2
	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	.00	.00	71.10	35.10	.90	270.97	7.20	.00	.00	260.64	502.74
MIN.	.00	.00	-4.50	-6.00	.90	-24.01	-36.00	.00	.00	-63.79	-148.46
MEAN	.00	.00	67.50	36.00	113.40	250.39	152.10	.00	.00	735.49	1014.75
STDEV	.000	.000	6.000	3.269	4.38	32.975	2.130	.000	.000	50.972	97.829

CH.	23	24	25	26	27	28	29	30	31	32	33
NAPE	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	C1
	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	65.17	289.61	204.82	186.20	139.65	139.65	214.13	195.51	167.58	141.96	8.12
MIN.	-207.92	-74.48	-55.86	-55.86	-27.93	-27.93	-65.17	-55.86	-55.86	-55.86	-5.80
MEAN	726.18	688.94	521.36	428.26	586.53	65.17	605.15	614.46	586.53	623.77	139.20
STDEV	49.129	51.223	42.694	41.462	25.467	24.626	41.243	40.636	31.410	27.526	2.027

CH.	34	35	36	37	38	39	40	41	42	43	44
NAPE	C2	C3	L1	S1	S2	P1	P2	T1	T2	T3	T4
	(MS)	(MS)	(MS)	(MS)	(MS)	(PSI)	(PSI)	(TONS)	(TONS)	(TONS)	(TONS)
MAX.	12.76	11.60	.00	10.20	41.16	.15	.18	.00	.00	.00	.00
MIN.	-9.28	-5.90	.00	-17.15	-41.16	-.22	-.22	.00	.00	.00	.00
MEAN	104.40	121.80	.00	370.44	387.59	1.67	1.05	.00	.00	.00	.00
STDEV	3.015	2.155	.000	6.074	11.865	.056	.063	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR
 TIME IN 68 MINUTE INTERVALS FROM START OF TAPE 42
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 L1 (MPH)	2 W2 DEG.	3 LHL1 (MS)	4 JHT1 (PS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (PS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	35.73	176.46	276.52	.00	164.64	6.10	99.47	10.80	78.89	F.10	36.00
MIN.	21.37	6.57	-20.54	.00	-13.72	-10.80	-34.30	-27.90	-6.86	-0.90	-2.70
MEAN	29.03	149.95	125.22	.00	164.64	58.50	274.40	166.30	148.94	49.50	39.60
STDEV	2.609	14.317	31.452	.000	22.046	.971	8.968	1.660	11.913	1.014	4.003

CH. NAME	12 3HPL2 (MS)	13 2HCL3 (MS)	14 3LDT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4MT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	.00	34.20	15.60	.90	164.64	9.00	.00	.00	242.66	484.12
MIN.	.00	.00	-2.70	-5.40	-.50	-13.72	-36.00	.00	.00	-74.48	-144.96
MEAN	.00	.00	67.50	35.10	113.40	240.10	151.20	.00	.00	735.49	1014.75
STDEV	.000	.000	2.664	1.711	.446	17.514	1.670	.000	.000	37.193	71.935

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	55.86	214.13	176.86	167.58	93.10	102.41	176.89	167.58	135.65	130.34	6.56
MIN.	-214.13	-55.86	-55.86	-44.55	-27.93	-27.93	-55.86	-55.86	-46.55	-37.24	-5.80
MEAN	726.18	674.63	521.36	418.65	586.53	55.86	605.15	614.46	586.53	614.46	136.04
STDEV	37.239	38.563	33.570	32.654	19.183	16.419	33.953	33.469	21.662	16.215	1.906

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 T1 (TONS)	42 T2 (TONS)	43 T3 (TONS)	44 T4 (TONS)
MAX.	4.64	9.28	.00	6.86	34.30	.17	.14	.00	.00	.00	.00
MIN.	-4.64	-4.64	.00	-17.15	-30.87	-0.19	-0.25	.00	.00	.00	.00
MEAN	103.24	120.64	.00	373.87	384.16	1.67	1.05	.00	.00	.00	.00
STDEV	1.443	1.675	.000	5.335	6.893	.050	.054	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 22 - 6
 TIME IN 6F MINUTE INTERVALS FROM START OF TAPE 43
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 W2 (FFG)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	34.45	169.43	277.63	.00	277.83	11.70	168.07	14.40	144.06	15.30	63.00
MIN.	18.18	129.61	-30.87	.00	-20.98	-5.00	-20.58	-26.10	-13.72	-1.80	-3.60
MEAN	28.71	159.52	198.94	.00	171.50	58.50	277.63	164.20	202.37	50.40	41.40
STDEV	2.756	7.557	44.823	.000	37.524	1.422	19.162	2.406	22.672	2.038	7.985

CH. NAME	12 3HRT2 (MS)	13 2HRL3 (MS)	14 3HRT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	.00	61.20	36.00	.90	219.52	13.50	.00	.00	279.30	512.05
MIN.	.00	.00	-4.50	-7.20	-9.90	-17.15	-32.40	.00	.00	-63.79	-358.27
MEAN	.00	.00	67.50	35.10	113.40	243.53	152.10	.00	.00	735.49	1024.10
STDEV	.000	.000	6.929	3.723	9.460	33.084	2.221	.000	.000	52.176	100.247

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	65.17	242.06	325.85	267.62	196.20	176.69	316.54	316.54	279.30	251.37	4.26
MIN.	-242.06	-83.79	-55.86	-65.17	-27.93	-27.93	-65.17	-55.86	-65.17	-65.17	-4.64
MEAN	726.18	688.64	521.36	428.26	586.53	65.17	605.15	614.46	586.53	623.77	136.68
STDEV	50.024	52.008	47.606	45.090	25.776	24.871	45.935	44.896	34.928	30.917	1.984

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (PS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	13.62	9.28	.00	13.72	54.88	.21	.25	.00	.00	.00	.00
MIN.	-4.64	-10.44	.00	-27.44	-51.45	-.29	-.33	.00	.00	.00	.00
MEAN	88.16	124.12	.00	370.44	384.16	1.67	1.03	.00	.00	.00	.00
STDEV	1.517	3.468	.000	6.380	12.829	.062	.075	.000	.000	.000	.000

SUPPLY OF STATISTICAL DATA FOR FG 24 - 1
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPE 0
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH.	1	2	3	4	5	6	7	8	9	10	11
NAME	W1	W2	IHL1	IHT1	2HL1	2HT1	3HL1	3HT1	3HL2	3HT2	3HRL1
	(MPH)	DEG.	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	28.39	209.37	.00	2.70	44.59	.00	24.01	.00	17.15	4.50	1.80
MIN.	13.40	.00	.00	.00	-3.43	.00	-17.15	.00	-3.43	-1.80	-.00
MEAN	19.46	139.52	.00	30.60	188.65	.00	270.97	.00	116.65	51.30	50.40
STDEV	2.570	54.889	.000	.430	2.436	.000	5.501	.000	2.776	.906	.427

CH.	12	13	14	15	16	17	18	19	20	21	22
NAME	3HPL2	3HPL3	3HPT1	3HPT2	3HPT3	4HL1	4HT1	4V1	4HT2	4V1	4V2
	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	.00	7.20	3.66	6.30	130.50	58.31	6.30	.00	.00	111.72	.00
MIN.	.00	-27.00	-6.30	-2.70	-23.40	-6.86	-35.10	.00	.00	-74.48	.00
MEAN	.00	205.20	52.20	47.70	78.50	236.67	170.10	.00	.00	1024.10	.00
STDEV	.000	2.015	1.616	1.537	9.576	3.819	2.248	.000	.000	30.319	.000

CH.	23	24	25	26	27	28	29	30	31	32	33
NAME	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	4V5
	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	74.49	167.58	121.03	111.72	102.41	83.79	130.34	121.03	141.96	121.03	5.80
MIN.	-135.65	-65.17	-55.86	-65.17	-18.62	-27.93	-37.24	-46.55	-27.93	-18.62	-5.80
MEAN	1056.58	596.17	1215.61	595.17	1191.68	716.87	1014.79	1061.34	958.93	956.06	141.52
STDEV	33.230	34.777	25.943	24.936	10.078	9.574	25.100	27.019	21.176	14.521	3.407

CH.	34	35	36	37	38	39	40	41	42	43	44
NAME	C2	C3	L1	S1	S2	P1	P2	T1	T2	T3	T4
	(PSI)	(MS)	(MS)	(MS)	(MS)	(PSI)	(PSI)	TONS	TONS	TONS	TONS
MAX.	3.48	6.06	.00	17.15	17.15	.18	.12	.00	.00	.00	.00
MIN.	-2.49	-5.80	.00	-10.20	-20.58	-30	-1.19	.00	.00	.00	.00
MEAN	148.48	136.88	.00	401.31	428.75	1.56	1.61	.00	.00	.00	.00
STDEV	1.474	3.815	.000	4.472	5.469	.076	.043	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 24 - 2
 TYPE IN 60 MINUTE INTERVALS FROM START OF TAPE 1
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1 11 (MFH)	2 W2 DEG.	3 1HL1 (MS)	4 1HT1 (PS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HL1 (MS)
MAX.	37.26	159.40	.00	1.80	246.96	.00	113.19	.00	37.73	12.60	41.40
MIN.	18.18	.00	.00	-.50	-10.29	.00	-17.15	.00	-6.86	-2.70	-1.80
MEAN	24.24	749.55	.00	29.70	195.51	.00	264.11	.00	186.65	53.10	47.70
STDEV	2.582	46.632	.000	.368	10.128	.000	6.903	.000	5.470	1.559	2.511

CH. NAME	12 3HL2 (MS)	13 3HL3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	18.50	24.70	23.40	43.20	178.36	14.40	.00	.00	268.61	.00
MIN.	.00	-36.90	-4.50	-2.70	-12.60	-10.29	-41.40	.00	.00	-83.76	.00
MEAN	.00	204.30	51.30	42.30	60.30	240.10	167.40	.00	.00	1014.79	.00
STDEV	.000	2.206	1.370	1.278	6.231	16.142	2.114	.000	.000	50.819	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	53.10	316.54	251.37	251.37	223.44	223.44	269.99	264.99	186.20	148.96	6.96
MIN.	-325.85	-83.79	-65.17	-65.17	-37.24	-37.24	-83.79	-83.79	-55.86	-55.86	-5.80
MEAN	1068.58	596.17	1219.61	556.17	1191.68	716.67	1024.10	1061.34	958.93	566.17	136.04
STDEV	59.017	56.543	48.405	46.962	25.517	24.839	45.371	46.423	31.469	24.807	3.410

CH. NAME	34 (2)	35 C3 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (MS)	39 F1 (FSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	4.64	8.12	.00	17.15	24.01	.25	.22	.00	.00	.00	.00
MIN.	-5.80	-8.12	.00	-27.44	-51.45	-4.44	-2.28	.00	.00	.00	.00
MEAN	145.64	135.72	.00	464.74	428.75	1.57	1.63	.00	.00	.00	.00
STDEV	1.687	3.877	.000	7.459	10.365	.102	.070	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 24 - 3
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 2
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 L1 (MPT)	2 V2 (FG)	3 1HL1 (MS)	4 3HT1 (PS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3-L1 (MS)	8 3HT1 (MS)	9 3HL2 (PS)	10 3HT2 (MS)	11 3HL1 (MS)
MAX.	31.58	159.40	.00	2.80	318.99	.00	216.09	.00	75.46	21.60	72.90
MIN.	18.18	.00	.00	-50	-20.58	.00	-30.87	.00	-6.86	-2.70	-3.60
MEAN	24.88	169.49	.00	30.60	205.80	.00	253.62	.00	152.08	52.20	48.60
STDEV	2.330	25.618	.000	.386	47.746	.000	20.181	.000	10.225	3.097	7.815

CH. NAME	12 3HPT2 (MS)	13 2HPT3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	27.00	68.40	36.00	60.30	346.43	21.60	.00	.00	437.37	.00
MIN.	.00	-202.20	-6.80	-6.10	-9.00	-20.58	-46.80	.00	.00	-134.65	.00
MEAN	.00	202.50	53.10	43.20	57.60	243.53	166.50	.00	.00	1014.79	.00
STDEV	.000	14.949	5.491	3.338	6.276	36.317	2.892	.000	.000	70.272	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	102.41	418.95	344.47	353.78	260.68	251.37	372.40	372.40	279.30	251.37	27.84
MIN.	-400.33	-102.41	-102.41	-102.41	-46.55	-37.24	-130.34	-102.41	-74.48	-65.17	-17.40
MEAN	108.58	596.17	1228.92	556.17	1200.99	716.87	1024.10	1061.34	558.93	996.17	146.16
STDEV	73.419	75.364	64.224	63.508	34.535	33.548	61.954	62.231	37.627	32.903	12.955

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 F1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	8.12	11.60	.00	17.15	58.31	.30	.25	.00	.00	.00	.00
MIN.	-8.12	-10.44	.00	-30.87	-68.60	-39	-36	.00	.00	.00	.00
MEAN	142.68	133.40	.00	404.74	428.75	1.59	1.64	.00	.00	.00	.00
STDEV	1.901	3.602	.000	8.916	14.669	.055	.043	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 24 - 4
 TIME IN 61 MINUTE INTERVALS FROM START OF TAPE 3
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1 (MPH)	2 W2 DEG.	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	31.26	209.37	.00	1.80	384.16	.00	222.55	.00	75.46	22.50	74.70
MIN.	16.59	.00	.00	-.60	-27.44	.00	-24.01	.00	-6.86	-2.70	-3.60
MEAN	24.56	169.49	.00	30.60	216.09	.00	257.25	.00	152.08	53.10	47.70
STDEV	2.697	33.374	.000	.414	61.027	.000	23.935	.000	12.267	3.609	9.349

CH. NAME	12 3HL2 (MS)	13 3HL3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	.00	27.00	68.40	37.80	67.50	315.56	21.60	.00	.00	556.60	.00
MIN.	.00	-202.50	-5.40	-9.60	-6.30	-27.44	-41.40	.00	.00	-176.89	.00
MEAN	.00	202.50	54.00	40.50	54.90	250.39	167.40	.00	.00	1014.79	.00
STDEV	.000	16.051	6.517	4.634	7.119	47.999	3.261	.000	.000	61.870	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	130.34	437.57	353.76	353.78	242.06	242.06	301.02	301.02	297.92	268.61	20.88
MIN.	-437.57	-140.56	-130.34	-130.34	-46.55	-37.24	-130.34	-121.03	-83.79	-82.79	-9.28
MEAN	1107.89	996.17	1228.92	596.17	1200.59	716.87	1024.10	1061.34	558.93	996.17	153.12
STDEV	55.314	87.170	71.563	66.868	37.530	36.839	68.847	69.031	42.283	37.657	3.677

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	5.80	15.08	.00	17.15	92.61	.30	.30	.00	.00	.00	.00
MIN.	-10.44	-15.08	.00	-30.87	-89.18	-.41	-.46	.00	.00	.00	.00
MEAN	145.00	145.00	.00	404.74	428.75	1.61	1.66	.00	.00	.00	.00
STDEV	1.050	3.907	.000	5.598	17.643	.110	.109	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 24 - 5
 TIME IN 48 MINUTE INTERVALS FROM START OF TAPE 4
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = $\mu(\text{PP})$ - STRAINS

CH. NAME	1 V1 (MPH)	2 W2 DFG.	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HKL1 (MS)
MAX.	31.58	229.31	.00	2.70	41.16	.00	20.58	.00	24.01	6.30	10.40
MIN.	7.97	.00	.00	.00	-3.43	.00	-24.01	.00	-3.43	-1.40	-0.90
MEAN	15.95	159.52	.00	29.70	192.08	.00	253.42	.00	188.67	51.30	45.50
STDEV	4.354	55.001	.000	.446	3.392	.000	4.507	.000	3.442	.666	.623

CH. NAME	12 2HT2 (MS)	13 3HFL3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HT2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	5.40	4.50	2.70	52.20	52.61	5.40	.00	.00	176.89	.00
MIN.	.00	-45.90	-6.30	-2.70	.00	-6.86	-48.60	.00	.00	-55.86	.00
MEAN	.00	203.40	52.20	30.60	.00	226.38	167.40	.00	.00	996.17	.00
STDEV	.000	2.099	1.634	.893	1.154	5.003	1.852	.000	.000	28.253	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	74.48	176.49	148.96	148.96	130.34	130.34	148.96	148.96	102.41	93.10	5.80
MIN.	-167.58	-74.48	-55.86	-55.86	-27.53	-18.62	-37.24	-37.24	-27.93	-27.93	-5.80
MEAN	1117.20	986.86	1210.30	586.86	1191.68	716.87	1005.48	1042.72	950.93	546.17	148.48
STDEV	30.560	32.511	25.486	26.043	11.569	11.277	26.122	28.551	16.647	16.193	3.567

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 T1 (TONS)	42 A2 (TONS)	43 A3 (TONS)	44 TOMS
MAX.	3.48	6.96	.00	13.72	17.15	.18	.14	.00	.00	.00	.00
MIN.	-3.48	-5.80	.00	-24.01	-27.44	-.32	-.18	.00	.00	.00	.00
MEAN	148.48	140.36	.00	408.17	432.18	1.67	1.70	.00	.00	.00	.00
STDEV	1.521	3.683	.000	4.898	5.970	.074	.049	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 24 - 6
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPE 61
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MYCCO - STRAINS

CH. NAME	1 (MPH)	2 W2 CFG.	3 JHL1 (MS)	4 JHT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (PS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	29.03	229.31	.00	3.60	6.86	.00	24.01	.00	13.72	2.70	2.70
MIN.	10.85	.00	.00	.00	-3.43	.00	-13.72	.00	-3.43	-1.30	-.50
MEAN	18.18	189.43	.00	32.40	185.22	.00	298.41	.00	188.65	56.70	57.80
STDEV	3.803	24.315	.000	.337	2.472	.000	5.011	.000	2.428	.666	.554

CH. NAME	12 3HRL2 (MS)	13 3HPL3 (MS)	14 3HRT1 (MS)	15 3HRY2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	.00	2.10	4.50	2.70	6.30	30.87	6.10	.00	.00	121.03	.00
MIN.	.00	-23.40	-2.70	-1.80	-14.00	-6.86	-31.50	.00	.00	-74.48	.00
MEAN	.00	207.90	37.80	36.00	117.50	246.96	175.50	.00	.00	1024.10	.00
STDEV	.000	2.183	.854	.618	4.983	2.520	2.138	.000	.000	20.169	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 2V1 (MS)	26 2VP (PS)	27 2V3 (MS)	28 2R 3V4 (MS)	29 2V1 (PS)	30 2V2 (MS)	31 2V3 (PS)	32 2V4 (MS)	33 2V5 (MS)
MAX.	74.48	130.34	93.10	74.48	37.24	27.93	74.48	74.48	74.48	55.86	6.56
MIN.	-130.34	-74.48	-46.52	-55.86	-37.24	-27.93	-27.93	-46.55	-46.55	-27.93	-5.86
MEAN	1058.58	1005.46	1228.92	1005.48	1141.68	735.49	1014.79	1061.34	558.93	986.86	141.52
STDEV	17.833	20.971	17.911	17.486	6.035	5.549	14.822	16.067	11.913	8.393	2.925

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	3.48	8.12	.00	10.28	13.72	.15	.08	.00	.00	.00	.00
MIN.	-3.48	-6.96	.00	-13.72	-17.15	-.23	-.15	.00	.00	.00	.00
MEAN	148.48	143.64	.00	397.88	428.75	1.59	1.64	.00	.00	.00	.00
STDEV	1.137	3.367	.000	3.150	3.651	.064	.031	.000	.000	.000	.000

FG 24 - 7

SUMMARY OF STATISTICAL DATA FOR
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP 63
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 L1 (MPH)	2 W2 (EG)	3 JHL1 (MS)	4 JHT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (PS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	33.61	209.37	.00	2.70	85.18	.00	96.04	.00	24.01	16.20	23.40
MIN.	14.04	.00	.00	.00	-3.43	.00	-17.15	.00	-3.43	-1.30	-1.60
MEAN	24.88	149.55	.00	30.60	199.65	.00	274.40	.00	188.65	55.80	52.20
STDEV	3.075	37.373	.000	.484	7.214	.000	6.922	.000	3.658	1.026	1.230

CH. NAME	12 3HL2 (MS)	13 3HL3 (MS)	14 3HRT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	.00	9.00	37.00	37.00	113.40	92.61	7.20	.00	.00	167.58	.00
MIN.	.00	-26.10	-2.70	-1.00	-116.10	-10.29	-34.20	.00	.00	-74.48	.00
MEAN	.00	205.20	34.20	28.00	116.10	246.56	172.60	.00	.00	1024.10	.00
STDEV	.000	2.143	1.434	1.421	109.854	5.168	2.077	.000	.000	36.944	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	53.10	214.13	307.23	288.61	167.58	176.89	158.27	158.27	148.46	121.03	8.12
MIN.	-204.82	-83.79	-74.48	-65.17	-27.93	-27.93	-55.86	-46.55	-74.48	-55.86	-14.72
MEAN	1058.58	996.17	1228.92	966.17	1191.68	735.49	1024.10	1061.34	958.93	986.86	156.60
STDEV	39.169	41.632	37.946	36.534	17.224	16.934	31.904	32.760	25.666	18.737	3.522

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (MS)	38 S2 (MS)	39 P1 (PS)	40 P2 (PS)	41 A1 (TONS)	42 A2 (TONS)	43 A3 (TONS)	44 A4 (TONS)
MAX.	4.64	25.52	.00	17.15	20.58	.21	.18	.00	.00	.00	.00
MIN.	-4.64	-9.28	.00	-24.01	-48.02	-.41	-.23	.00	.00	.00	.00
MEAN	153.12	138.04	.00	401.31	428.75	1.55	1.61	.00	.00	.00	.00
STDEV	1.719	7.214	.000	6.455	7.176	.096	.053	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FIG 24 - 8
 TIME IN 68 MINUTE INTERVALS FROM START OF TAPE 64
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1 L1 (MPH)	2 V2 (FTG)	3 1FL1 (MS)	4 1HT1 (MS)	5 2HT1 (MS)	6 3HT1 (MS)	7 3HL1 (MS)	8 3HT2 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	38.28	150.40	.00	442.47	.00	.00	236.87	84.16	84.60	24.30	84.60
MIN.	20.74	9.57	.00	-37.73	.00	.00	-30.87	-10.29	-6.30	-3.60	-6.30
MEAN	28.71	169.49	.00	30.60	226.38	.00	274.40	195.51	54.90	55.80	54.90
STDEV	2.977	17.148	.000	.525	76.583	.000	35.329	14.454	4.340	4.340	12.836

CH. NAME	12 3PR12 (MS)	13 3HP13 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4FL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	28.80	54.50	87.30	173.70	401.31	21.60	.00	.00	406.64	.00
MIN.	.00	-200.70	-6.30	-10.80	-26.10	-34.30	-16.00	.00	.00	-176.89	.00
MEAN	.00	200.70	35.60	25.20	26.10	270.97	171.50	.00	.00	1024.10	.00
STDEV	.000	26.587	10.576	6.862	15.543	58.488	3.823	.000	.000	89.028	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4I2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	121.03	437.57	400.64	400.23	251.37	242.06	409.64	400.33	257.92	269.99	12.76
MIN.	-428.26	-130.34	-111.72	-121.03	-46.55	-55.86	-139.65	-121.03	-111.72	-111.72	-8.12
MEAN	1050.27	1005.48	1239.23	1014.78	1200.89	754.17	1033.41	1070.65	558.93	946.17	151.96
STDEV	92.826	94.012	86.811	84.415	41.408	40.106	78.629	76.656	47.298	41.539	3.645

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C4 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 T1 (TONS)	42 T2 (TONS)	43 T3 (TONS)	44 T4 (TONS)
MAX.	6.56	13.92	.00	17.15	72.03	.34	.36	.00	.00	.00	.00
MIN.	-5.28	-13.92	.00	-41.16	-75.46	-.47	-.46	.00	.00	.00	.00
MEAN	154.28	143.84	.00	404.74	428.75	1.57	1.63	.00	.00	.00	.00
STDEV	2.144	3.484	.000	11.402	17.792	.113	.116	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EC 24 - 9
 TIME IN 6E FINITE INTERVALS FROM START OF TAPE 65
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1 W1 (MPH)	2 W2 FEG.	3 14L1 (MS)	4 34P1 (PS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (PS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	38.28	219.34	.00	15.30	407.35	.00	325.28	.00	52.61	24.30	114.30
MIN.	20.74	.00	.00	-1.90	-243.53	.00	-37.73	.00	-17.15	-6.30	-9.60
MEAN	28.71	169.49	.00	29.70	246.56	.00	267.54	.00	158.94	57.60	54.90
STDEV	3.604	24.036	.000	.551	90.206	.000	49.627	.000	18.413	6.023	17.859

CH. NAME	12 3HPL2 (PS)	13 3HRL3 (MS)	14 3HRT1 (MS)	15 3HRT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (PS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	32.40	100.00	73.80	72.90	418.46	22.50	.00	.00	614.46	.00
MIN.	.00	-197.10	-9.90	-19.80	-156.60	-48.02	-153.00	.00	.00	-195.51	.00
MEAN	.00	197.10	40.50	15.80	156.60	281.25	171.90	.00	.00	1024.10	.00
STDEV	.000	22.674	15.182	9.293	26.438	76.619	5.560	.000	.000	116.702	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	158.27	545.29	651.70	651.70	325.85	335.16	642.39	651.70	465.50	446.65	17.40
MIN.	-530.67	-176.59	-130.65	-148.96	-55.86	-55.86	-148.96	-139.65	-111.72	-111.72	-10.44
MEAN	1089.27	1005.46	1238.23	1005.48	1200.59	754.11	1024.10	1070.65	558.93	996.17	148.48
STDEV	117.678	119.438	102.633	100.688	48.339	47.443	98.193	98.751	61.849	56.194	3.700

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 T1 (TONS)	42 T2 (TONS)	43 T3 (TONS)	44 A4 (TONS)
MAX.	8.12	12.76	.00	20.58	99.47	.36	.30	.00	.00	.00	.00
MIN.	-9.29	-10.44	.00	-61.74	-106.33	-.51	-.51	.00	.00	.00	.00
MEAN	146.16	139.20	.00	404.74	428.75	1.61	1.66	.00	.00	.00	.00
STDEV	2.271	4.073	.000	12.813	23.397	.128	.135	.000	.000	.000	.000

SUPPLY OF STATISTICAL DATA FOR EC 25 - 1
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 70
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 W1 (MPH)	2 W2 DFC.	3 1HL1 (MS)	4 1MT1 (PC)	5 2HL1 (MS)	6 2HT1 (PS)	7 3HL1 (MS)	F 3HT1 (MS)	9 3HL2 (MS)	10 3MT2 (MS)	11 3HL1 (MS)
MAX.	29.67	189.43	.00	4.50	233.24	5.40	75.46	5.40	13.72	9.00	13.50
MIN.	4.15	139.5F	.00	-1.80	-3.43	-8.10	-13.72	-21.60	-3.43	-1.80	-90
MEAN	21.69	159.52	.00	45.00	178.36	66.60	356.72	194.40	1F5.22	45.00	66.60
STDEV	2.127	6.624	.000	.704	7.590	.698	5.525	1.581	2.511	.615	.768

CH. NAME	12 3HPL2 (MS)	13 3HPL3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	7.20	.00	28.80	.00	75.46	5.40	65.17	.00	158.27	.00
MIN.	.00	-27.90	.00	-90	.00	-6.86	-38.70	-3.43	-.90	-65.17	.00
MEAN	.00	206.70	.00	43.20	.00	243.53	1F5.40	185.22	112.50	1042.72	.00
STDEV	.000	2.039	.000	.972	.000	3.382	1.652	2.756	.450	31.884	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	65.17	176.89	121.03	111.72	111.72	111.72	121.03	111.72	53.10	43.79	19.72
MIN.	-176.89	-65.17	-55.86	-55.86	-18.62	-6.31	-37.24	-37.24	-18.62	-19.62	-25.92
MEAN	1117.20	586.96	1219.61	966.86	1197.68	763.47	1061.34	1052.03	958.93	596.17	153.12
STDEV	31.418	32.658	24.538	23.550	9.522	8.657	23.271	24.581	16.524	15.387	10.060

CH. NAME	34 F2 (MS)	35 C2 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 TONE	42 TONE	43 TONE	44 A4 TONE
MAX.	4.64	8.12	.00	13.72	17.15	.23	.14	.00	.00	.00	.00
MIN.	-3.48	-6.56	.00	-17.15	-20.58	-.37	-.37	.00	.00	.00	.00
MEAN	140.36	133.40	.00	404.74	432.18	1.48	1.56	.00	.00	.00	.00
STDEV	1.774	3.828	.000	4.508	5.223	.091	.047	.600	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 25 - 2
 TYPE IN 68 MINUTE INTERVALS FROM START OF TAPE 82
 THE MEAN VALUES ON CHANNELS 3 THRU 64 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 W1 (MP)	2 W2 (MP)	3 3HL1 (MS)	4 4HT1 (MS)	5 5HL1 (MS)	6 6HT1 (MS)	7 7HL1 (MS)	8 8HT1 (MS)	9 9HL2 (MS)	10 10HT2 (MS)	11 11HL1 (MS)
MAX.	28.39	199.40	.00	2.70	51.45	4.50	17.15	4.50	13.72	3.60	1.80
MIN.	16.59	.00	.00	-.90	-3.43	-9.00	-17.15	-24.30	-3.43	-.90	-.90
MEAN	20.74	159.52	.00	43.20	181.79	63.90	356.72	153.50	165.22	44.10	66.60
STDEV	1.799	23.287	.000	.567	2.494	.686	4.671	1.587	2.247	.544	.462

CH. NAME	12 12HL1 (MS)	13 13HL2 (MS)	14 14HT1 (MS)	15 15HT2 (MS)	16 16HT3 (MS)	17 17HL1 (MS)	18 18HT1 (MS)	19 19HT2 (MS)	20 20HT2 (MS)	21 21HT1 (MS)	22 22HT2 (MS)
MAX.	.00	6.30	.00	3.60	.00	13.72	5.40	61.74	1.30	135.65	.00
MIN.	.00	-25.80	.00	-.90	.00	-6.86	-39.60	-3.43	.00	-55.86	.00
MEAN	.00	209.70	.00	41.40	.00	246.96	184.50	188.65	111.60	1042.72	.00
STDEV	.000	1.530	.000	.552	.000	2.354	1.715	3.617	.459	28.675	.000

CH. NAME	23 23V1 (MS)	24 24V2 (MS)	25 25V1 (MS)	26 26V2 (MS)	27 27V3 (MS)	28 28V4 (MS)	29 29V1 (MS)	30 30V2 (MS)	31 31V3 (MS)	32 32V4 (MS)	33 33V1 (MS)
MAX.	55.85	130.24	102.41	83.79	121.03	121.03	130.34	130.34	111.72	93.10	6.96
MIN.	-120.34	-65.17	-55.86	-65.17	-18.62	-18.62	-37.24	-37.24	-18.62	-18.62	-5.80
MEAN	1117.20	690.86	1219.61	956.17	1151.68	763.42	1070.65	1052.03	958.93	996.17	145.00
STDEV	28.433	29.315	23.357	23.607	9.886	8.859	22.157	23.653	16.265	14.866	3.290

CH. NAME	34 34C2 (MS)	35 35C3 (MS)	36 36L1 (MS)	37 37C1 (MS)	38 38C2 (MS)	39 39P1 (FSI)	40 40P2 (PSI)	41 41T1 (MS)	42 42T2 (MS)	43 43T3 (MS)	44 44T4 (MS)
MAX.	3.48	8.12	.00	13.72	17.15	.19	.10	.00	.00	.00	.00
MIN.	-3.48	-5.80	.00	-13.72	-17.15	-.25	-.17	.00	.00	.00	.00
MEAN	126.89	134.56	.00	404.74	432.18	1.48	1.56	.00	.00	.00	.00
STDEV	1.674	3.920	.000	4.335	5.211	.075	.036	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 25 - 3
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPF 84
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 11 (MPH)	2 W2 (EG)	3 14L1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3MCL1 (MS)
MAX.	30.94	209.37	.00	4.50	90.47	2.70	34.30	5.40	17.15	3.60	13.50
MIN.	16.27	.00	.00	-.90	-3.43	-9.10	-13.72	-22.50	-3.43	-.90	-1.80
MEAN	27.01	179.46	.00	40.50	185.22	61.20	349.86	197.60	125.22	43.20	64.80
STDEV	2.738	16.380	.000	.759	5.485	.689	4.669	1.582	2.651	.634	1.056

CH. NAME	12 3HRL2 (MS)	13 34RL3 (MS)	14 34RT1 (MS)	15 34PT2 (MS)	16 34PT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	6.30	.00	4.50	.00	58.31	6.30	69.60	.90	204.82	.00
MIN.	.00	-27.00	.00	-.90	.00	-6.66	-36.90	-3.43	-.90	-65.17	.00
MEAN	.00	208.80	.00	36.90	.00	246.96	183.60	186.65	111.60	1042.72	.00
STDEV	.000	1.897	.000	.634	.000	4.073	1.674	5.064	.373	37.966	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	74.48	214.13	214.13	214.13	204.82	204.82	223.44	223.44	159.27	159.27	5.80
MIN.	-232.75	-74.48	-65.17	-55.86	-27.93	-27.93	-55.86	-55.86	-27.93	-27.93	-5.80
MEAN	1117.20	586.86	1219.61	966.86	1191.68	763.42	1070.65	1052.03	958.93	996.17	141.52
STDEV	38.744	39.851	33.846	33.414	18.208	17.273	33.122	33.299	22.637	21.000	3.396

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (PS)	38 C2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 P1 (TONS)	42 A2 (TONS)	43 A3 (TONS)	44 A4 (TONS)
MAX.	3.48	6.66	.00	20.58	20.58	.21	.17	.00	.00	.00	.00
MIN.	-4.64	-6.66	.00	-20.58	-37.73	-0.33	-.18	.00	.00	.00	.00
MEAN	138.04	131.06	.00	404.74	432.18	1.49	1.56	.00	.00	.00	.00
STDEV	1.160	4.076	.000	5.083	7.452	.015	.046	.000	.000	.000	.000

EG 25 - 4

SUMMARY OF STATISTICAL DATA FOR TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 85

THESE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIFFICULT MEANING

(MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 W2 (EG)	3 1H11 (MS)	4 1HT1 (MS)	5 2H11 (MS)	6 2HT1 (MS)	7 3H11 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HLL1 (MS)
MAY.	31.58	195.40	.00	4.50	92.61	3.60	48.02	17.15	4.50	18.90
MIN.	15.82	69.79	.00	-1.80	-3.43	-5.00	-17.15	-3.43	-1.80	-1.90
MEAN	26.16	169.49	.00	38.70	181.79	57.60	399.57	185.22	43.20	62.10
STDEV	2.397	8.074	.000	.692	6.004	.723	5.033	3.214	.694	1.180

CH. NAME	12 3HPL2 (MS)	13 3HLL3 (MS)	14 3HRT1 (MS)	15 3HRT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAY.	.00	7.20	.00	5.40	.00	102.90	18.00	123.48	.90	260.68	.00
MIN.	.00	-30.60	.00	-1.80	.00	-6.86	-40.50	-3.43	-.90	-83.79	.00
MEAN	.00	207.90	.00	23.30	.00	250.39	182.70	186.65	111.60	1033.41	.00
STDEV	.000	1.936	.000	.551	.000	5.477	1.767	7.789	.474	41.226	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 4V5 (MS)
MAY.	74.48	297.92	288.61	288.61	223.44	214.13	251.37	251.37	155.51	176.89	8.12
MIN.	-208.61	-74.48	-55.86	-55.86	-37.24	-37.24	-74.48	-74.48	-46.55	-55.86	-5.80
MEAN	1117.20	977.55	1210.30	986.66	1191.68	772.73	1061.34	1052.03	558.93	1005.48	135.72
STDEV	40.024	42.029	36.466	36.232	20.123	14.541	33.232	34.012	23.298	22.269	3.378

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 (TONS)	42 A2 (TONS)	43 A3 (TONS)	44 A4 (TONS)
MAY.	4.64	9.20	.00	17.15	17.15	.25	.19	.00	.00	.00	.00
MIN.	-3.48	-6.96	.00	-20.87	-51.45	-0.41	-0.23	.00	.00	.00	.00
MEAN	135.20	135.72	.00	405.17	432.18	1.50	1.57	.00	.00	.00	.00
STDEV	1.541	4.110	.000	6.527	7.971	.094	.051	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 25 - 5
 TIME IN 68 MINUTE INTERVALS FROM START OF TAPE 86
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1 W1 (MFS)	2 W2 (MFS)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HPL1 (MS)
MAX.	27.64	209.37	.00	14.40	504.21	14.40	343.00	24.30	56.04	27.00	114.30
MIN.	21.05	.00	.00	-2.70	-41.16	-2.70	-24.01	-5.40	-10.29	-3.60	-5.40
MEAN	29.35	165.45	.00	28.70	219.52	56.70	343.00	192.60	192.00	45.90	64.80
STDEV	3.739	26.372	.000	2.394	77.319	2.661	33.137	2.169	13.263	3.305	12.936

CH. NAME	12 2HL2 (MS)	13 3HL3 (MS)	14 3HL1 (MS)	15 3HT2 (MS)	16 3HL3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	.00	24.30	.00	63.00	.00	418.46	27.50	360.15	1.80	763.42	.00
MIN.	.00	-205.20	.00	-31.50	.00	-30.17	-5.40	-27.44	-.90	-176.89	.00
MEAN	.00	205.20	.00	55.10	.00	274.40	184.50	209.23	110.70	1042.72	.00
STDEV	.000	24.322	.000	4.824	.000	55.765	3.108	50.232	.387	111.636	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 4V5 (MS)
MAX.	135.65	586.53	530.67	512.05	325.85	316.54	429.26	428.26	372.40	344.47	12.76
MIN.	-577.22	-158.27	-130.34	-130.65	-46.55	-55.86	-149.56	-121.03	-121.03	-111.72	-15.00
MEAN	1107.39	986.86	1226.42	1005.48	1200.50	782.04	1079.56	1061.34	568.24	1005.48	154.28
STDEV	113.795	114.885	93.528	92.990	50.437	45.039	91.247	92.297	56.193	52.598	3.627

CH. NAME	34 4V2 (MS)	35 4V3 (MS)	36 4V4 (MS)	37 4V5 (MS)	38 4V6 (MS)	39 4V7 (MS)	40 4V8 (MS)	41 4V9 (MS)	42 4V10 (MS)	43 4V11 (MS)	44 4V12 (MS)
MAX.	9.29	16.24	.00	17.15	96.04	.32	.33	.00	.00	.00	.00
MIN.	-10.44	-15.08	.00	-51.45	-62.61	-4.47	-1.57	.00	.00	.00	.00
MEAN	133.40	132.24	.00	408.17	437.18	1.49	1.57	.00	.00	.00	.00
STDEV	2.409	4.547	.000	12.122	22.747	.120	.136	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 25 - 6
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPF 87
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE PIN, AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 W1 (MPH)	2 W2 DEG.	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	29.03	179.46	.00	0.00	391.02	15.30	222.55	15.30	12.32	16.40	76.50
MIN.	17.86	4.97	.00	-1.40	-12.72	-8.10	-13.72	-25.20	-3.43	-1.80	-1.80
MEAN	23.61	159.52	.00	37.40	192.06	54.90	329.78	190.80	145.22	43.20	61.20
STDEV	2.607	14.171	.000	1.560	35.029	1.308	12.417	1.680	6.627	1.735	5.332
CH. NAME	17 3HR12 (MS)	13 3HR13 (MS)	14 3HR11 (MS)	15 3HR12 (MS)	16 3HR13 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	.00	19.80	.00	24.20	.00	346.43	21.60	246.46	.90	437.57	.00
MIN.	.00	-169.80	.00	-4.50	.00	-13.72	-41.40	-10.29	-.90	-154.27	.00
MEAN	.00	205.20	.00	35.10	.00	250.34	143.60	192.04	110.70	1033.41	.00
STDEV	.000	6.541	.000	2.036	.000	25.522	2.048	21.341	.462	72.538	.000
CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	102.41	417.55	400.33	469.64	242.06	242.06	307.23	297.62	232.75	223.44	10.44
MIN.	-418.55	-111.72	-93.10	-63.10	-46.55	-37.24	-130.34	-102.41	-55.86	-46.55	-6.96
MEAN	1117.20	977.55	1219.61	648.46	1200.99	772.73	1070.65	1052.03	964.24	996.17	150.80
STDEV	76.934	79.105	63.744	64.282	34.060	33.104	60.122	60.630	37.965	31.549	3.168
CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 TONS
MAX.	4.64	12.76	.00	13.72	64.60	.37	.30	.00	.00	.00	.00
MIN.	-5.40	-16.24	.00	-41.16	-75.46	-0.59	-0.46	.00	.00	.00	.00
MEAN	135.72	142.68	.00	411.60	432.18	1.50	1.57	.00	.00	.00	.00
STDEV	1.949	3.666	.000	4.324	14.350	.105	.104	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FC 25 - 7
 TIME IN 64 FIFTE INTERVALS FROM START OF TAPE 148
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 (PS)	3 1HL1 (MS)	4 1HT1 (PS)	5 2HL1 (MS)	6 2HT1 (PS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	35.41	199.40	.00	17.10	92.61	21.60	150.62	6.30	17.15	23.40	38.70
MIN.	16.27	.00	.00	-.90	-3.43	-6.90	-13.72	-17.10	-3.43	-.90	-.90
MEAN	23.29	129.61	.00	44.10	178.36	66.60	356.72	195.30	165.22	45.90	64.60
STDEV	3.625	44.607	.000	.739	5.069	.962	6.811	1.665	2.528	.560	1.345

CH. NAME	12 3HL2 (MS)	13 3HL3 (MS)	14 3HRT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (PS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	20.70	.00	47.20	.00	257.25	31.50	240.10	.90	176.89	.00
MIN.	.00	-22.50	.00	-1.90	.00	-6.86	-177.30	-3.43	-.90	-55.36	.00
MEAN	.00	207.90	.00	16.90	.00	246.10	185.40	181.76	116.70	1033.41	.00
STDEV	.000	2.089	.000	1.563	.000	8.504	4.341	7.770	.422	26.836	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (PS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	55.86	267.58	111.72	102.41	111.72	102.41	176.69	176.89	146.96	121.03	6.66
MIN.	-150.27	-65.17	-55.86	-55.86	-27.93	-27.93	-37.24	-27.93	-27.93	-11.62	-6.56
MEAN	1126.51	977.55	1210.30	966.86	1191.68	763.42	1061.34	1042.72	968.24	996.17	154.26
STDEV	26.046	26.677	21.906	21.501	10.413	5.761	20.143	21.138	16.673	13.122	3.291

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 F1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 F1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	11.60	9.26	.00	13.72	17.15	.21	.14	.00	.00	.00	.00
MIN.	-8.12	-6.56	.00	-17.15	-20.58	-.41	-.22	.00	.00	.00	.00
MEAN	129.92	138.04	.00	408.17	432.18	1.52	1.60	.00	.00	.00	.00
STDEV	3.606	3.950	.000	4.029	4.874	.094	.044	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 25 - 8
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPE 153
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 W1 (MS)	2 W2 (MS)	3 IHL1 (MS)	4 IPT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAY.	26.99	145.40	5.40	5.40	4.50	4.50	17.15	6.30	17.15	4.50	5.40
MIN.	17.66	.00	-1.00	-1.00	-6.66	-6.66	-17.15	-23.40	-3.43	-1.90	-1.90
MEAN	24.08	179.46	30.60	30.60	185.22	185.22	356.72	193.50	185.22	44.10	64.60
STDEV	2.115	16.530	.000	.574	1.001	.621	5.224	1.740	2.468	.623	.718

CH. NAME	12 3FL2 (MS)	13 3HL3 (MS)	14 3HRT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HT2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAY.	.00	7.20	.00	9.00	.00	418.46	40.50	397.88	1.80	135.65	.00
MIN.	.00	-28.80	.00	-6.00	.00	-10.29	-182.70	-6.86	.00	-46.55	.00
MEAN	.00	205.80	.00	13.50	.00	250.39	182.70	188.65	109.80	1033.41	.00
STDEV	.000	2.044	.000	.590	.000	24.013	10.462	23.151	.447	27.842	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 4V5 (MS)
MAY.	65.17	146.96	93.10	111.72	65.17	65.17	111.72	121.03	63.79	65.17	12.76
MIN.	-139.65	-74.44	-55.86	-55.86	-16.62	-16.62	-27.93	-27.93	-18.62	-18.62	-5.80
MEAN	1117.20	986.86	1219.61	566.86	1191.68	763.42	1061.34	1042.72	558.93	946.17	138.04
STDEV	26.674	29.731	20.716	20.267	8.168	8.043	18.681	20.373	14.330	12.395	3.117

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 P1 (MS)	38 P2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 P1 (TONS)	42 P2 (TONS)	43 P1 (TONS)	44 P2 (TONS)
MAY.	4.64	10.44	.00	17.15	17.15	.19	.12	.00	.00	.00	.00
MIN.	-10.44	-6.66	.00	-13.72	-20.58	-30	-21	.00	.00	.00	.00
MEAN	127.04	131.08	.00	464.74	432.18	1.53	1.61	.00	.00	.00	.00
STDEV	1.635	3.773	.000	4.270	4.076	.080	.041	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 25 - 9
 TIME IN 60 MINUTE INTERVALS FROM STAFT LF TAPE 154
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 (EG)	3 (MS)	4 (MS)	5 (MS)	6 (MS)	7 (MS)	8 (PS)	9 (PS)	10 (MS)	11 (MS)
MAY.	26.31	219.34	.00	2.70	44.55	1.80	17.15	6.30	13.72	2.70	5.40
MIN.	15.31	30.88	.00	-.50	-3.43	-9.90	-17.15	-25.20	-3.43	-.90	-.60
MEAN	22.65	119.43	.00	37.60	185.22	59.40	346.43	192.60	185.22	44.10	62.10
STDEV	2.119	13.649	.000	.769	2.684	.661	4.916	1.818	2.449	.572	.464

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAY.	.00	8.10	.00	1.80	.00	52.61	11.70	133.77	1.80	134.65	.00
MIN.	.00	-27.90	.00	-1.80	.00	-6.86	-39.60	-3.43	-.90	-46.55	.00
MEAN	.00	207.90	.00	17.60	.00	246.96	181.80	185.22	109.90	1033.41	.00
STDEV	.000	2.180	.000	.543	.000	6.203	1.862	5.357	.526	26.351	.000

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAY.	55.86	148.06	121.03	111.72	93.10	93.10	121.03	121.03	111.72	93.10	6.96
MIN.	-121.03	-55.86	-46.55	-55.86	-27.93	-16.62	-27.93	-27.93	-16.62	-27.93	-4.64
MEAN	1126.51	577.55	1210.30	946.86	1101.68	763.42	1061.34	1042.72	958.93	1005.48	134.56
STDEV	25.243	29.201	22.416	22.175	10.265	9.745	20.622	21.137	15.804	14.805	3.083

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAY.	10.44	8.12	.00	17.15	17.15	.22	.14	.00	.00	.00	.00
MIN.	-3.44	-11.60	.00	-13.72	-20.58	-.47	-.22	.00	.00	.00	.00
MEAN	129.92	138.04	.00	404.74	432.18	1.55	1.60	.00	.00	.00	.00
STDEV	1.591	3.667	.000	4.265	5.146	.090	.042	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 25 - 10
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPE 14
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 (FEET)	3 3HL1 (MS)	4 4HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HCL1 (MS)
MAX.	33.49	169.40	.00	10.80	59.47	17.10	137.20	7.20	17.15	18.00	30.60
MIN.	10.65	109.67	.00	-1.80	-3.43	-9.90	-20.58	-26.10	-3.43	-0.90	-3.60
MEAN	22.65	159.52	.00	44.10	176.36	46.60	353.29	151.70	185.22	45.00	63.91
STDEV	3.363	8.289	.000	1.399	6.447	.798	6.460	1.641	2.673	.911	1.527
CH. NAME	12 3HF12 (MS)	13 3HL3 (MS)	14 3HRT1 (MS)	15 3HST2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	.00	18.50	.00	51.30	.00	113.19	22.50	160.65	1.60	232.75	.00
MIN.	.00	-34.20	.00	-1.80	.00	-6.86	-41.40	-6.86	-0.90	-55.96	.00
MEAN	.00	205.20	.00	41.40	.00	236.67	192.60	165.22	108.90	1033.41	.00
STDEV	.000	2.049	.000	1.721	.000	5.165	1.809	6.452	.450	36.408	.001
CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 2V1 (MS)	26 2V2 (MS)	27 2V3 (MS)	28 2V4 (MS)	29 2V1 (MS)	30 2V2 (MS)	31 2V3 (MS)	32 2V4 (MS)	33 2V1 (MS)
MAX.	65.17	279.30	196.20	195.51	139.65	139.65	176.59	176.89	130.34	111.72	6.96
MIN.	-251.37	-65.17	-46.55	-46.55	-18.62	-18.62	-46.55	-46.55	-27.93	-27.63	-6.96
MEAN	1126.51	969.24	1210.30	977.55	1101.68	754.11	1061.34	1042.72	966.24	996.17	139.20
STDEV	35.466	40.935	30.170	30.780	14.469	14.682	27.042	29.508	21.365	15.606	3.446
CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 (TONS)	42 A2 (TONS)	43 A3 (TONS)	44 A4 (TONS)
MAX.	4.64	12.76	.00	13.72	20.58	.23	.22	.00	.00	.00	.00
MIN.	-16.24	-6.90	.00	-34.30	-37.73	-0.50	-0.32	.00	.00	.00	.00
MEAN	131.09	132.24	.00	411.60	432.18	1.61	1.67	.00	.00	.00	.00
STDEV	3.578	4.155	.000	5.560	6.673	.101	.057	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 25 - 11
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 19
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 SEC	3 (MS)	4 (MS)	5 (MS)	6 (MS)	7 (MS)	8 (MS)	9 (PS)	10 (MS)	11 (MS)
MAX.	20.67	190.40	.00	1.00	58.31	2.70	13.72	5.40	17.15	2.70	4.50
MIN.	16.59	.00	.00	-3.60	.00	-10.80	-17.15	-21.60	-3.43	-2.70	-2.70
MEAN	21.37	149.55	.00	46.00	174.93	53.10	360.15	193.50	185.22	46.80	65.70
STDEV	2.185	30.224	.000	.643	2.741	.881	4.713	1.672	2.565	.623	.593

CH. NAME	12 (MS)	13 (MS)	14 (MS)	15 (MS)	16 (MS)	17 (MS)	18 (MS)	19 (MS)	20 (MS)	21 (MS)	22 (MS)
MAX.	.00	7.20	.00	1.00	.00	6.86	6.30	30.67	1.80	130.34	.00
MIN.	.00	-25.70	.00	-5.10	.00	-6.86	-27.80	.00	.00	-46.55	.00
MEAN	.00	207.00	.00	48.60	.00	240.10	195.30	181.79	108.90	1033.41	.00
STDEV	.000	2.067	.000	1.041	.000	2.353	1.871	1.583	.451	24.574	.000

CH. NAME	23 (MS)	24 (MS)	25 (MS)	26 (MS)	27 (MS)	28 (MS)	29 (MS)	30 (MS)	31 (MS)	32 (MS)	33 (MS)
MAX.	55.86	130.34	121.03	121.03	121.03	130.34	102.41	102.41	111.72	93.10	6.96
MIN.	-111.72	-65.17	-46.55	-55.06	-18.62	-5.31	-27.93	-37.24	-27.93	-18.62	-3.28
MEAN	1126.51	977.55	1210.30	866.44	1191.68	754.11	1052.03	1042.72	968.24	996.17	143.84
STDEV	23.035	27.526	21.728	21.433	9.364	8.221	17.582	20.338	17.212	10.464	3.422

CH. NAME	34 (MS)	35 (MS)	36 (MS)	37 (MS)	38 (MS)	39 (PSI)	40 (PSI)	41 (MS)	42 (MS)	43 (MS)	44 (MS)
MAX.	4.64	9.28	.00	17.15	13.72	.25	.11	.00	.00	.00	.00
MIN.	-17.92	-12.76	.00	-13.72	-24.01	-46	-1.19	.00	.00	.00	.00
MEAN	122.24	140.36	.00	409.17	432.18	1.60	1.67	.00	.00	.00	.00
STDEV	2.166	4.104	.000	4.052	4.552	.078	.040	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 25 - 12
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPF 20
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 (G)	3 VHL1 (MS)	4 VHT1 (MS)	5 VHL1 (MS)	6 VHT1 (MS)	7 VHL1 (MS)	8 VHT1 (MS)	9 VHL2 (MS)	10 VHT2 (MS)	11 VHPL1 (MS)
MAX.	35.41	199.40	.00	9.50	336.14	12.60	336.14	16.90	42.32	21.60	112.50
MIN.	21.05	9.97	.00	-2.70	-24.01	-11.70	-17.15	-18.90	-6.86	-2.70	-3.60
MEAN	28.07	159.52	.00	49.60	148.54	54.90	367.01	194.40	188.65	48.60	67.50
STDEV	2.890	25.039	.000	1.786	47.670	1.755	19.580	2.648	9.379	2.181	7.990

CH. NAME	12 VHT2 (MS)	13 VHPL3 (MS)	14 VHFT1 (MS)	15 VHPT2 (MS)	16 VHRT3 (MS)	17 VHL1 (MS)	18 VHT1 (MS)	19 VHL2 (MS)	20 VHT2 (MS)	21 VHL1 (MS)	22 VHPL2 (MS)
MAX.	.00	22.50	.00	50.40	.00	404.74	30.60	343.00	.90	512.05	.00
MIN.	.00	-206.10	.00	-2.70	.00	-17.15	-34.20	-13.72	.00	-16.20	.00
MEAN	.00	207.00	.00	49.50	.00	253.82	195.30	192.08	106.90	1652.03	.00
STDEV	.000	10.712	.000	3.103	.000	36.913	2.434	29.403	.437	92.610	.000

CH. NAME	23 VHT1 (MS)	24 VHT2 (MS)	25 VHT1 (MS)	26 VHT2 (MS)	27 VHT3 (MS)	28 VHT4 (MS)	29 VHT1 (MS)	30 VHT2 (MS)	31 VHT3 (MS)	32 VHT4 (MS)	33 VHT1 (MS)
MAX.	140.96	530.67	424.26	400.64	247.06	242.06	400.33	391.02	297.92	288.61	16.24
MIN.	-549.79	-176.89	-93.10	-111.72	-46.55	-46.55	-130.34	-111.72	-102.41	-93.10	-9.24
MEAN	100.58	506.17	1219.61	556.17	1200.59	772.73	1079.56	1061.34	568.24	956.17	141.52
STDEV	96.023	97.363	73.485	73.355	36.259	34.179	71.756	72.856	45.844	38.804	3.368

CH. NAME	34 VHT2 (MS)	35 VHT3 (MS)	36 VHT1 (MS)	37 VHT2 (MS)	38 VHT3 (MS)	39 VHT4 (MS)	40 VHT1 (PSI)	41 VHT2 (PSI)	42 VHT3 (PSI)	43 VHT4 (PSI)	44 VHT1 (TONS)
MAX.	10.44	17.40	.00	20.58	65.17	.32	.29	.00	.00	.00	.00
MIN.	-9.28	-11.60	.00	-34.30	-78.89	-1.50	-46	.00	.00	.00	.00
MEAN	175.29	136.88	.00	46.17	432.18	1.57	1.64	.00	.00	.00	.00
STDEV	2.521	4.448	.000	10.521	16.785	.114	.105	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EC 26 - 1
 TYPE IN 66 MINUTE INTERVALS FROM START OF TAPE 2
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MTCPC - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MPH	W1	W2	IHL1	IHT1	2HL1	2HT1	3HL1	3HT1	3HL2	3HT2	3HLL1
MAX.	21.54	180.43	205.80	7.20	133.77	16.20	130.34	7.20	30.87	16.20	31.50
MIN.	17.86	.00	-24.01	-1.60	-3.43	-4.90	-20.58	-22.50	-3.43	-1.80	-1.80
MEAN	24.88	159.57	603.68	41.40	192.08	34.20	243.52	177.30	185.22	49.50	35.70
STDEV	2.634	15.143	23.406	.502	9.562	.644	6.588	1.815	3.397	.953	2.406

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MPH	3HP12	3HFL3	3HPT1	3HPT2	3HPT3	4HL1	4HT1	4HT2	4HT2	4V1	4V2
MAX.	.00	15.30	56.00	27.00	27.00	175.35	9.00	120.05	.90	260.68	.00
MIN.	.00	-34.20	-6.30	-1.80	-3.60	-10.29	-43.20	-6.86	-.90	-83.79	.00
MEAN	.00	191.70	72.00	61.20	9.00	240.10	169.20	185.22	68.40	1033.41	.00
STDEV	.000	2.276	1.610	1.246	1.672	10.747	1.924	1.370	.495	36.096	.000

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MPH	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	4V5
MAX.	.00	251.37	232.75	242.06	176.89	176.89	204.82	204.82	176.89	157.27	25.52
MIN.	.00	-65.17	-58.86	-65.17	-37.24	-16.62	-55.66	-65.17	-37.24	-27.93	-20.86
MEAN	.00	577.55	1210.30	966.86	1191.68	763.42	1061.34	1092.03	568.24	996.17	145.64
STDEV	.000	43.247	38.471	40.175	20.065	20.647	34.510	36.471	27.337	20.556	12.750

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MPH	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	4V5	4V6
MAX.	4.64	9.28	9.28	17.15	17.15	.25	.18	.00	.00	.00	.00
MIN.	-5.80	-8.12	-8.12	-27.44	-44.59	-4.66	-4.00	.00	.00	.00	.00
MEAN	126.44	129.92	129.92	408.17	432.18	1.59	1.63	.00	.00	.00	.00
STDEV	2.051	3.864	3.864	6.563	8.594	.104	.066	.000	.000	.000	.000

EG 26 - 2

SUMMARY OF STATISTICAL DATA FOR
 TYPE IN 60 MINUTE INTERVALS FROM START OF TAPE
 THE PEAK VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT PEAKING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 (MG)	3 3HL1 (MS)	4 4HT1 (MS)	5 5HL1 (MS)	6 6HT1 (MS)	7 7HL1 (MS)	8 8HT1 (MS)	9 9HL1 (MS)	10 10HT2 (MS)	11 11HL1 (MS)
MAY.	31.26	185.43	298.41	9.60	192.08	7.20	133.77	10.80	54.88	12.60	51.30
MIN.	17.26	95.73	-27.44	-1.80	-10.24	-5.00	-27.44	-37.60	-6.66	-0.90	-1.60
MEAN	25.52	169.49	524.74	35.60	158.54	30.60	233.24	175.50	185.22	49.50	36.50
STDEV	2.445	7.556	41.066	1.276	23.548	.937	9.735	1.411	5.259	1.273	4.310

CH. NAME	12 3PR12 (MS)	13 3MPL2 (MS)	14 3RHT1 (MS)	15 3HFT2 (MS)	16 3RHT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAY.	.00	28.90	44.10	17.10	40.50	236.67	17.10	181.79	2.70	286.61	.00
MIN.	.00	-45.00	-4.50	-1.10	-5.40	-10.29	-49.50	-6.86	-1.80	-121.03	.00
MEAN	.00	169.00	74.70	60.30	11.70	240.10	167.40	175.22	65.30	1033.41	.00
STDEV	.000	2.454	2.574	1.262	2.828	20.099	1.561	15.063	.580	46.635	.000

CH. NAME	23 2V1 (PS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAY.	.00	316.54	279.30	276.30	223.44	204.82	279.30	260.68	214.13	214.13	15.66
MIN.	.00	-93.10	-65.17	-74.48	-37.24	-37.24	-74.48	-74.48	-55.66	-46.55	-6.96
MEAN	.00	977.55	1210.30	986.86	1191.68	772.73	1061.34	1052.03	566.24	996.17	150.60
STDEV	.000	57.550	44.430	46.708	25.361	24.695	42.444	43.146	25.060	23.308	3.225

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (MS)	38 C2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 TCNS
MAY.	5.80	13.92	.00	13.72	41.16	.30	.30	.00	.00	.00	.00
MIN.	-6.96	-0.28	.00	-30.87	-51.45	-44	-41	.00	.00	.00	.00
MEAN	129.62	136.88	.00	411.60	432.16	1.60	1.61	.00	.00	.00	.00
STDEV	2.177	3.447	.000	7.602	9.960	.110	.083	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 76 - 3
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 0
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STEAINS

CH. NAME	1 (MPH)	2 W2 (MS)	3 1HL1 (MS)	4 1PT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HPL1 (MS)
MAX.	2P.07	219.34	207.37	140.40	168.07	117.00	185.22	6.30	6.86	135.90	160.20
MIN.	4.78	.00	-82.32	.00	-3.43	-17.10	-168.07	-52.20	-54.88	.90	-2.70
MEAN	8.29	120.61	82.32	44.10	192.08	36.90	240.30	176.40	181.79	52.20	37.80
STDEV	1.604	70.418	10.432	3.101	3.056	2.766	7.488	1.000	1.041	3.166	3.777

CH. NAME	12 (PS)	13 3HCL3 (MS)	14 3HT1 (MS)	15 3PRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	.00	9.90	144.00	52.20	226.80	85.75	4.50	61.74	37.80	242.06	.00
MIN.	.00	-58.50	-4.50	-51.30	.00	-75.46	-154.80	-78.89	-1.80	-37.24	.00
MEAN	.00	180.00	83.70	70.20	.00	236.67	169.20	161.74	72.90	1014.79	.00
STDEV	.000	2.521	3.433	1.774	5.019	3.008	3.882	2.532	1.392	0.227	.000

CH. NAME	23 (MS)	24 2V2 (PS)	25 3V1 (MS)	26 3V2 (PS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	.00	716.87	37.24	381.71	18.62	18.62	27.93	167.58	37.24	1294.09	127.60
MIN.	.00	-46.55	-27.93	-27.24	-505.84	-409.64	-0.31	-0.31	-804.97	-27.93	-4.64
MEAN	.00	688.24	1200.05	677.55	1182.37	763.42	1042.72	1024.10	968.24	1005.48	151.96
STDEV	.000	18.047	7.367	11.111	13.655	10.548	5.546	7.075	18.432	29.122	3.373

CH. NAME	34 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	6.96	107.88	.00	13.72	13.72	.08	.04	.00	.00	.00	.00
MIN.	-8.12	-5.12	.00	-220.81	-233.24	-1.34	-1.10	.00	.00	.00	.00
MEAN	126.44	139.20	.00	411.60	428.75	1.66	1.66	.00	.00	.00	.00
STDEV	4.573	2.682	.000	5.600	5.692	.044	.032	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 27 - 1
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 13
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (PS) = MICRO - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MAX.	31.59	209.37	24.01	4.30	106.33	5.40	51.45	17.10	30.87	6.30	13.50
MIN.	4.78	59.70	-202.37	-1.80	-3.43	-5.00	-6.46	-2.70	-3.43	-.90	-.90
MEAN	24.68	179.46	415.03	44.10	181.79	44.10	150.52	62.10	185.22	41.40	40.50
STDEV	2.257	10.808	11.592	.736	8.164	.667	5.468	1.680	3.164	.791	1.285

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAX.	25.20	30.70	3.60	3.60	10.80	109.76	23.40	113.16	.60	223.44	.00
MIN.	-3.60	-1.80	-1.80	-1.80	-2.70	-3.43	-3.60	-3.43	-.90	-111.72	.00
MEAN	80.10	62.10	44.10	46.80	43.20	185.22	50.40	161.75	71.10	903.07	.00
STDEV	2.074	1.826	.581	.628	.776	7.256	2.223	8.118	.503	42.064	.000

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAX.	53.70	214.13	232.75	214.13	204.82	204.82	204.52	214.13	175.89	130.34	6.96
MIN.	-145.51	-93.79	-83.79	-74.48	-37.24	-46.55	-74.48	-93.79	-83.79	-83.79	-5.80
MEAN	847.21	693.76	893.76	846.45	854.45	670.32	912.38	503.07	805.63	865.83	142.68
STDEV	35.659	41.659	47.271	40.909	22.681	22.147	35.469	36.586	28.336	21.467	3.322

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAX.	4.64	10.44	117.00	17.15	37.73	.23	.17	.00	.00	.00	.00
MIN.	-4.64	-6.96	-9.00	-24.01	-41.16	-.47	-.25	.00	.00	.00	.00
MEAN	140.36	120.82	351.00	425.32	428.75	1.35	1.41	.00	.00	.00	.00
STDEV	2.098	3.766	13.663	6.993	8.931	.098	.056	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR FG 27 - 2
 TIME IN 6E MINUTE INTERVALS FROM START FF TAPE 14
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 (FG)	3 IHL1 (MS)	4 IHT1 (MS)	5 2HL1 (MC)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL1 (MS)	10 3HT2 (MS)	11 3HLL1 (MS)
MAX.	32.22	200.37	3.43	6.10	184.65	6.30	113.19	5.90	37.73	11.70	32.60
MIN.	15.14	80.73	-3.43	-1.80	-6.96	-5.60	-3.43	-6.30	-6.86	-0.90	-1.80
MEAN	25.52	179.46	40P.17	45.00	185.22	44.10	147.40	63.00	188.65	42.30	40.50
STDEV	2.319	7.274	1.665	1.027	18.251	.917	7.332	1.688	5.157	1.284	2.846
CH. NAME	12 3HPL2 (MS)	13 3HPL3 (MS)	14 3HRT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	21.60	22.50	28.80	15.30	32.40	181.79	16.20	150.92	1.80	344.47	0.00
MIN.	-76.50	-4.50	-3.60	-2.70	-3.60	-6.86	-4.50	-6.86	-0.90	-148.96	0.00
MEAN	76.50	67.10	46.80	40.50	43.70	189.22	49.50	185.22	70.20	912.39	0.00
STDEV	17.725	1.530	1.307	.932	1.790	17.700	1.716	15.517	.499	58.744	.000
CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	53.10	400.33	335.16	325.45	214.13	204.82	260.68	260.68	176.89	158.27	5.80
MIN.	-65.64	-63.79	-74.48	-74.48	-37.24	-27.93	-93.10	-93.10	-74.48	-65.17	-6.96
MEAN	47.21	893.76	803.07	853.76	884.45	661.01	921.69	912.39	865.83	865.83	140.36
STDEV	57.662	58.973	56.502	54.140	25.561	25.112	47.031	47.091	32.350	25.931	3.256
CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 TGN5 (TONS)	42 T1 (TONS)	43 TGN5 (TONS)	44 A4 TGN5 (TONS)
MAX.	5.80	0.28	144.00	20.58	30.87	.23	.22	.00	.00	.00	.00
MIN.	-4.64	-15.08	-18.00	-27.44	-61.74	-0.36	-0.24	.00	.00	.00	.00
MEAN	141.52	140.36	351.00	425.22	428.75	1.38	1.44	.00	.00	.00	.00
STDEV	2.157	3.645	16.850	8.051	11.358	.094	.075	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 27 - 3
 TIME IN 65 MINUTE INTERVALS FROM START OF TAPE 15
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 11 (MPP)	2 W2 (FIG.)	3 14L1 (MS)	4 1HT1 (MS)	5 24L1 (MS)	6 2HT1 (MS)	7 34L1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 34RL1 (MS)
MAX.	32.54	189.43	.00	9.00	215.56	13.50	164.64	21.60	61.74	11.00	54.90
MIN.	18.46	60.79	-3.43	-1.80	-17.15	-1.80	-6.86	-1.80	-6.86	-1.80	-2.70
MEAN	25.52	165.49	406.17	44.10	195.51	45.00	150.92	63.00	168.65	42.30	41.40
STDEV	2.507	7.553	1.604	1.695	42.158	1.545	17.227	2.151	7.676	2.331	6.217

CH. NAME	12 34PI2 (MS)	13 34CL3 (MS)	14 34PT1 (MS)	15 34PT2 (MS)	16 34PT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	40.50	45.00	47.70	26.00	51.30	301.84	169.20	254.65	.90	446.88	.00
MIN.	-6.30	-2.70	-3.60	-5.40	-3.60	-13.72	-4.50	-10.25	-1.80	-176.89	.00
MEAN	81.00	62.10	40.50	51.30	44.10	195.51	52.20	168.65	71.80	912.86	.00
STDEV	3.892	3.996	4.326	2.758	4.127	34.533	7.333	27.644	.503	71.896	.000

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	111.72	400.23	409.64	372.40	265.99	260.68	381.71	381.71	232.75	165.51	11.60
MIN.	-418.05	-111.72	-102.41	-111.72	-37.24	-37.24	-111.72	-111.72	-74.43	-74.43	-8.12
MEAN	837.00	603.07	903.07	903.07	884.45	670.32	931.00	921.69	865.83	865.83	136.88
STDEV	77.020	76.611	68.202	65.365	31.504	30.620	56.792	57.302	37.470	29.044	3.318

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (MS)	38 C2 (MS)	39 P1 (FSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	5.80	15.08	207.00	20.58	54.68	.25	.25	.00	.00	.00	.00
MIN.	-8.12	-8.12	-78.00	-34.30	-75.46	-.37	-.39	.00	.00	.00	.00
MEAN	142.68	135.72	351.00	425.32	428.75	1.39	1.45	.00	.00	.00	.00
STDEV	2.215	3.790	22.004	9.506	14.315	.104	.068	.000	.000	.000	.000

SUMMARY OF STATISTICAL DATA FOR EG 2F - 1
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 133
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
3HL1 (MS)	11	2HL1 (MS)	3HL1 (MS)	4HL1 (MS)	5HL1 (MS)	6HL1 (MS)	7HL1 (MS)	8HL1 (MS)	9HL1 (MS)	10HL1 (MS)	11HL1 (MS)
MAX.	33.18	189.43	147.40	3.60	113.19	4.50	72.03	4.00	68.60	5.40	20.70
MIN.	15.14	100.67	-13.72	-0.90	-3.43	-5.40	-3.43	-4.50	-6.96	-0.90	-0.90
MEAN	24.24	160.46	243.53	45.90	181.70	41.40	137.20	54.90	188.65	47.70	43.20
STDEV	3.026	7.647	15.755	.664	5.336	.583	4.525	.785	6.794	.622	1.463

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
3HL2 (MS)	12	3HL3 (MS)	3HL4 (MS)	3HL5 (MS)	3HL6 (MS)	4HL1 (MS)	4HL2 (MS)	4HL3 (MS)	4HL4 (MS)	4HL5 (MS)	4HL6 (MS)
MAX.	15.60	18.90	20.70	10.80	.00	106.33	85.75	6.30	6.30	167.58	307.23
MIN.	-2.70	-3.60	-2.70	-1.60	.00	-6.86	-3.43	-0.90	-0.90	-51.86	-83.79
MEAN	65.70	51.30	75.20	72.00	.00	161.79	185.22	36.50	36.50	595.84	1005.48
STDEV	1.758	1.461	1.823	2.675	.000	6.003	6.212	.547	.547	27.316	44.244

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
2V1 (MS)	23	2V2 (MS)	3V1 (MS)	3V2 (MS)	3V3 (MS)	3V4 (MS)	4V1 (MS)	4V2 (MS)	4V3 (MS)	4V4 (MS)	4V5 (MS)
MAX.	46.55	130.34	121.03	111.72	111.72	102.41	111.72	111.72	93.10	93.10	5.40
MIN.	-121.03	-37.24	-37.24	-37.24	-18.62	-18.62	-37.24	-46.55	-27.93	-27.93	-3.48
MEAN	567.91	555.84	512.05	351.02	437.57	453.43	545.84	595.84	586.53	586.53	145.00
STDEV	25.710	26.661	25.133	24.471	12.992	12.587	21.766	21.598	14.850	11.530	1.556

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
C2 (MS)	34	C3 (MS)	L1 (MS)	S1 (MS)	S2 (MS)	P1 (PSI)	P2 (PSI)	T1 (TONS)	T2 (TONS)	T3 (TONS)	T4 (TONS)
MAX.	2.32	5.80	111.00	6.86	17.15	.11	.10	8.62	7.18	7.40	76.11
MIN.	-3.48	-3.46	-33.00	-13.72	-24.01	-22	-15	-9.33	-7.18	-10.05	-89.03
MEAN	160.08	147.32	369.00	435.61	435.61	1.50	1.02	96.37	101.24	101.24	99.80
STDEV	1.041	1.843	10.666	3.551	5.712	.050	.036	2.268	1.923	1.951	4.051

SUMMARY OF STATISTICAL DATA FOR FG 20 - 1
 TIME IN 60 MINUTE INTERVALS FROM START FF TAPP 127
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 W2 (FFG)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	39.56	199.40	126.91	3.60	69.18	1.60	24.01	1.90	37.73	1.40	8.10
MIN.	10.18	.00	-30.87	-.90	-3.43	-4.50	-3.43	-4.50	-6.66	-1.80	-.90
MEAN	28.07	159.52	277.83	47.70	174.93	44.10	147.49	57.60	180.65	50.40	45.00
STDEV	3.503	27.906	16.705	.605	4.287	.587	2.150	.576	5.308	.528	.747

CH. NAME	12 3HPL2 (MS)	13 3HPL3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	11.70	5.40	25.20	27.90	.00	41.16	5.40	34.30	2.70	130.34	232.75
MIN.	-6.30	-4.50	-.00	-.00	.00	-3.43	-2.70	-3.43	-10.80	-27.93	-45.55
MEAN	66.60	51.30	64.80	63.50	.00	168.07	47.70	188.65	44.50	566.53	1005.48
STDEV	1.019	.612	.946	1.272	.000	3.120	.564	2.485	3.547	15.937	24.021

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	37.24	102.41	121.03	121.03	83.79	83.79	139.65	130.34	65.17	46.95	4.64
MIN.	-102.41	-37.24	-27.93	-27.93	-18.62	-9.31	-27.93	-27.93	-18.62	-18.62	-3.48
MEAN	577.72	595.84	512.05	311.71	437.57	484.12	566.53	586.53	586.53	586.53	143.16
STDEV	14.152	15.997	13.928	14.600	7.155	7.167	12.064	12.591	10.034	7.416	1.560

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 TOMS	42 A2 TOMS	43 A3 TOMS	44 A4 TOMS
MAX.	2.32	4.64	69.00	6.66	10.29	.12	.06	8.62	7.00	5.03	14.67
MIN.	-3.48	-3.48	-54.00	-13.72	-17.15	-.18	-.11	-11.45	-8.62	-8.62	-7.90
MEAN	143.84	145.00	406.00	435.61	439.04	1.41	.05	99.80	102.67	101.96	101.24
STDEV	.502	1.684	9.810	2.755	3.350	.042	.023	2.037	1.611	1.513	2.161

SUMMARY OF STATISTICAL DATA FOR EG 20 - 2
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 128
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE NO OBJECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (PS) = MICRO - STAINES

CH. NAME	1 V1 (MPS)	2 V2 (MPS)	3 V3 (MPS)	4 V4 (MPS)	5 V5 (MPS)	6 V6 (MPS)	7 V7 (MPS)	8 V8 (MPS)	9 V9 (MPS)	10 V10 (MPS)	11 V11 (MPS)
MAX.	34.13	209.37	102.90	3.60	126.91	4.50	65.60	14.40	58.31	5.40	12.50
MIN.	16.27	.00	-17.15	-3.43	-4.50	-4.50	-3.43	-4.50	-6.26	-1.40	-4.00
MEAN	23.20	176.46	274.40	46.80	178.36	41.40	137.20	55.60	168.65	50.40	43.20
STDEV	2.095	22.345	19.592	.679	10.866	.693	4.732	.818	6.449	.763	1.520

CH. NAME	12 V12 (MPS)	13 V13 (MPS)	14 V14 (MPS)	15 V15 (MPS)	16 V16 (MPS)	17 V17 (MPS)	18 V18 (MPS)	19 V19 (MPS)	20 V20 (MPS)	21 V21 (MPS)	22 V22 (MPS)
MAX.	29.70	22.50	16.20	14.40	.00	85.75	18.90	65.17	6.30	204.62	272.40
MIN.	-8.10	-5.40	-2.70	-1.40	.00	-6.86	-3.60	-3.43	-11.70	-65.17	-111.72
MEAN	66.60	50.40	66.60	64.80	.00	171.50	46.80	188.65	54.00	586.53	1014.79
STDEV	1.614	1.290	1.264	1.142	.000	9.813	.969	7.225	.782	31.506	58.531

CH. NAME	23 V23 (MPS)	24 V24 (MPS)	25 V25 (MPS)	26 V26 (MPS)	27 V27 (MPS)	28 V28 (MPS)	29 V29 (MPS)	30 V30 (MPS)	31 V31 (MPS)	32 V32 (MPS)	33 V33 (MPS)
MAX.	46.55	232.75	158.27	148.66	93.10	93.10	186.20	167.58	83.79	74.48	3.48
MIN.	-242.06	-46.55	-37.24	-46.55	-18.62	-18.62	-55.86	-55.86	-37.24	-27.93	-4.64
MEAN	577.22	595.84	512.05	351.02	446.88	493.43	595.84	595.84	516.53	586.53	145.60
STDEV	31.058	34.614	27.991	27.991	15.836	15.836	25.716	25.716	17.316	13.375	1.570

CH. NAME	34 V34 (MPS)	35 V35 (MPS)	36 V36 (MPS)	37 V37 (MPS)	38 V38 (MPS)	39 V39 (MPS)	40 V40 (MPS)	41 V41 (MPS)	42 V42 (MPS)	43 V43 (MPS)	44 V44 (MPS)
MAX.	2.32	5.60	93.00	10.29	24.01	.12	.11	9.33	4.62	9.33	12.92
MIN.	-2.32	-3.48	-69.00	-13.72	-30.67	-1.19	-1.15	-10.05	-9.33	-10.05	-13.64
MEAN	142.68	142.68	393.00	435.61	435.61	1.41	.95	96.37	102.67	101.56	100.52
STDEV	.993	1.626	15.660	4.086	6.650	.042	.040	2.603	2.305	2.604	5.854

SUMMARY OF STATISTICAL DATA FOR EC 29 -- 3
 TIME IN 6F MINUTE INTERVALS FROM START OF TAPE 0
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 1L1 (MPH)	2 W2 (FFG)	3 1HL1 (MS)	4 3HT1 (PS)	5 2HL1 (MS)	6 2HT1 (PS)	7 3HL1 (MS)	8 3HT1 (PS)	9 3HL2 (PS)	10 3PT2 (MS)	11 3HRL1 (MS)
MAX.	24.03	19.43	82.32	2.70	59.31	1.60	30.87	4.50	65.17	5.40	10.60
MIN.	17.86	.00	-10.29	-2.70	-3.43	-2.70	-3.43	-4.00	-6.86	-2.70	-1.80
MEAN	22.61	13.58	264.11	49.50	178.36	47.70	161.21	66.60	192.06	53.10	47.70
STDEV	2.159	33.209	14.381	.828	6.828	.680	3.072	.652	7.044	.859	1.073

CH. NAME	12 3HPL2 (MS)	13 3HPL3 (MS)	14 3HPT1 (MS)	15 3HOT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (PS)	19 4HL2 (MS)	20 4HT2 (PS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	8.10	7.20	15.30	24.30	.00	76.89	2.70	58.31	6.30	167.58	316.54
MIN.	-11.70	-9.00	-2.70	-1.80	.00	-6.86	-9.00	-6.86	-1.80	-65.17	-111.72
MEAN	41.00	61.20	61.40	63.60	.00	176.36	57.60	192.08	51.30	581.53	1014.79
STDEV	1.072	.931	1.303	1.580	.000	6.635	.808	5.465	.653	28.049	52.837

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	66.55	176.89	148.96	148.56	102.41	83.79	121.03	121.03	102.41	74.48	5.80
MIN.	-176.89	-46.55	-27.03	-27.24	-18.62	-18.62	-46.55	-37.24	-27.93	-27.93	-3.46
MEAN	577.22	588.84	512.05	361.02	437.57	493.43	605.15	559.84	586.93	586.93	142.64
STDEV	28.596	31.522	24.573	24.612	12.066	12.441	19.905	20.426	15.719	11.932	1.517

CH. NAME	34 (MS)	35 C2 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (MS)	39 P1 (PS)	40 P2 (PS)	41 TOMS (MS)	42 TOMS (MS)	43 TOMS (MS)	44 TOMS (MS)
MAX.	9.48	4.64	84.00	10.29	13.72	.11	.11	6.46	7.50	7.18	12.92
MIN.	-2.68	-2.32	-36.00	-13.72	-30.67	-1.16	-1.16	-7.90	-7.18	-7.90	-9.33
MEAN	142.68	149.64	381.00	435.61	436.04	1.42	.95	55.06	102.67	102.67	100.52
STDEV	1.047	1.679	11.711	3.865	5.645	.043	.040	1.564	1.742	1.774	2.436

SUMMARY OF STATISTICAL DATA FOR FC 30 - 1
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 18
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIFFICULT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICROSECONDS - STRAINS

CH. NAME	1 (MP)	2 (EG)	3 (MS)	4 (MS)	5 (MS)	6 (MS)	7 (MS)	8 (MS)	9 (MS)	10 (MS)	11 (MS)
MAX.	40.03	1026.51	.00	7.20	61.74	5.40	113.10	34.60	41.16	11.70	7.20
MIN.	10.53	.00	.00	.00	-3.43	-1.00	-3.43	-2.70	-6.36	-3.60	-1.00
MEAN	24.56	174.46	.00	45.00	181.79	42.30	150.92	53.10	152.08	44.52	46.60
STDEV	5.566	61.300	.000	.745	4.435	.502	4.136	1.103	6.015	.512	.879

CH. NAME	12 (MS)	13 (MS)	14 (MS)	15 (MS)	16 (MS)	17 (MS)	18 (MS)	19 (MS)	20 (MS)	21 (MS)	22 (MS)
MAX.	55.00	53.10	35.70	63.00	.00	130.34	63.90	44.59	4.50	23.10	145.96
MIN.	-13.50	-0.10	-6.00	-5.40	.00	-10.24	-1.00	-3.43	-19.60	-37.24	-74.46
MEAN	72.00	52.20	75.60	72.00	.00	101.70	45.00	188.65	49.50	595.14	1033.41
STDEV	5.578	1.525	3.605	5.145	.000	6.615	1.766	4.111	1.000	17.138	29.629

CH. NAME	23 (MS)	24 (MS)	25 (MS)	26 (MS)	27 (MS)	28 (MS)	29 (MS)	30 (MS)	31 (MS)	32 (MS)	33 (MS)
MAX.	37.24	102.41	102.41	83.79	74.46	74.46	83.79	43.79	46.55	46.55	3.46
MIN.	-102.41	-46.55	-37.24	-46.55	-9.31	-5.31	-27.93	-37.24	-27.93	-27.93	-3.46
MEAN	567.91	605.15	521.36	400.33	437.57	484.12	605.15	605.15	586.53	586.53	149.64
STDEV	16.044	21.541	22.703	22.002	8.275	8.013	19.574	16.110	10.234	10.234	1.562

CH. NAME	34 (MS)	35 (MS)	36 (MS)	37 (MS)	38 (MS)	39 (MS)	40 (MS)	41 (MS)	42 (MS)	43 (MS)	44 (MS)
MAX.	6.96	4.64	57.00	13.72	13.72	.11	.10	5.74	7.90	7.18	7.18
MIN.	-3.40	-3.46	-9.00	-10.29	-17.15	-1.14	-.12	-8.62	-6.46	-5.74	-10.77
MEAN	140.36	147.32	372.00	432.18	435.61	1.24	.97	97.65	103.39	101.24	97.65
STDEV	1.075	1.792	7.400	3.853	4.657	.044	.027	1.743	1.594	1.444	2.409

SUMMARY OF STATISTICAL DATA FOR
 TIME IN 68 MINUTE INTERVALS FROM START OF TAPE EG 30 - 2
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1 W1	2 W2	3 1HL1	4 1HT1	5 2HT1	6 2HT1	7 3HL1	8 3HT1	9 3HT2	10 3HT2	11 3HPL1
MAX.	37.32	250.22	.00	1.10	6.86	3.60	126.91	44.10	6.86	1.80	3HPL1 (MS)
MIN.	1.59	.00	.00	.00	.00	-4.50	-3.43	-1.80	-3.43	1.80	(MS)
MEAN	18.18	144.40	.00	46.80	178.36	41.40	147.49	52.20	168.65	47.70	
STDEV	6.826	42.472	.000	.452	1.701	.591	4.283	1.577	1.459	.493	.560

CH. NAME	12 3HPL2	13 3HPL3	14 3HPT1	15 3HPT2	16 3HPT3	17 4HL1	18 4HT1	19 4HT2	20 4HT2	21 1V1	22 1V2
MAX.	76.50	46.80	41.00	135.00	.00	45.02	27.50	3.43	1.80	27.93	46.55
MIN.	-4.50	.00	-4.50	-5.40	.00	.00	.00	-3.43	-1.80	-27.93	(MS)
MEAN	71.10	51.30	76.50	73.80	.00	174.93	46.80	188.65	48.60	555.34	1024.10
STDEV	10.287	1.841	13.410	18.767	.000	2.221	1.377	1.862	.457	6.602	11.169

CH. NAME	23 2V1	24 2V2	25 3V1	26 3V2	27 3V3	28 3V4	29 4V1	30 4V2	31 4V3	32 4V4	33 C1
MAX.	27.93	37.24	27.93	27.93	18.62	18.62	18.62	18.62	27.93	18.62	3.46
MIN.	-18.62	-18.62	-7.31	-18.62	-9.31	.00	-9.31	-9.31	-9.31	-9.31	(MS)
MEAN	567.91	203.15	512.05	391.02	437.57	484.12	565.84	595.84	586.53	586.53	143.84
STDEV	5.538	6.727	7.005	7.325	3.447	3.917	5.601	5.796	6.003	5.213	1.134

CH. NAME	34 C2	35 C3	36 L1	37 S1	38 S2	39 P1	40 P2	41 TONS	42 TCNS	43 TONS	44 TONS
MAX.	2.32	10.44	27.00	6.86	6.86	.06	.04	3.59	2.15	1.44	2.15
MIN.	-1.16	-4.64	-9.00	-6.86	-6.86	-1.11	-0.06	-3.59	-2.87	-2.15	-5.03
MEAN	140.36	142.68	372.00	435.61	435.61	1.44	.95	98.37	106.26	104.83	97.65
STDEV	.659	3.486	5.281	2.046	2.018	.023	.014	.693	.842	.824	1.154

SUMMARY OF STATISTICAL DATA FOR EC 20 - 3
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 140
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MSEC - STRAINS

CH. NAME	1 L1 (MPH)	2 W2 DFG	3 IHL1 (MS)	4 IHT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HL1 (MS)
MAX.	35.41	189.43	.00	2.70	65.17	2.70	27.44	8.10	41.16	4.50	2.10
MIN.	17.06	126.61	.00	-.60	-3.43	-5.40	-3.43	-3.60	-3.43	-.60	-1.60
MEAN	22.97	159.52	.00	47.70	178.36	38.70	130.34	51.30	188.65	51.30	45.00
STDEV	2.440	6.566	.000	.664	6.477	.542	2.236	.525	6.297	.573	.750
CH. NAME	12 3HBL2 (MS)	13 3HPL3 (MS)	14 3HRT1 (MS)	15 3HPT7 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	25.20	10.80	41.40	64.40	.00	61.74	12.60	51.45	4.50	158.27	269.94
MIN.	-2.70	-1.80	-1.80	-7.60	.00	-3.43	-3.60	-3.43	-.90	-65.17	-121.03
MEAN	69.30	40.50	72.90	70.20	.00	174.93	45.00	188.65	48.60	586.93	1024.10
STDEV	1.426	.848	2.390	3.402	.000	5.957	.749	5.274	.502	22.940	43.519
CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	46.55	186.20	139.65	130.34	102.41	111.72	83.10	102.41	74.48	65.17	4.64
MIN.	-176.89	-37.24	-27.03	-37.24	-18.62	-18.62	-46.55	-37.24	-27.03	-27.93	-3.48
MEAN	567.91	595.84	512.05	361.02	446.88	444.12	605.19	505.84	566.53	566.53	145.00
STDEV	24.075	27.635	23.740	24.042	12.627	12.434	18.839	20.230	14.777	12.478	1.447
CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 TCNS	42 A2 TCNS	43 A3 TONS	44 A4 TONS
MAX.	3.48	4.64	45.00	10.20	13.72	.12	.11	8.62	7.18	7.90	9.62
MIN.	-2.48	-3.48	-6.00	-13.72	-30.87	-.22	-.19	-9.33	-8.62	-6.46	-9.33
MEAN	143.84	140.36	469.00	435.61	439.04	1.38	.60	101.24	106.26	105.55	101.24
STDEV	1.077	1.651	5.526	3.810	5.347	.046	.037	1.560	1.790	1.575	2.717

SUMMARY OF STATISTICAL DATA FOR FG 30 - 4
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 143
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 (MS) - MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 W2 DEC.	3 IHL1 (MS)	4 IHT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HLL1 (MS)
MAX.	37.00	229.31	.00	2.70	.41.16	1.80	24.01	3.60	46.02	2.70	9.00
MIN.	17.54	179.46	.00	-1.70	-3.43	-5.40	-17.15	-4.50	-3.43	-.90	-2.70
MEAN	25.52	38.26P	.00	47.70	179.36	43.20	147.49	54.00	166.65	51.30	47.70
STDEV	3.615		.000	.715	2.701	.628	1.738	.591	4.501	.504	.555

CH. NAME	12 3HFL2 (MS)	13 3HRL3 (MS)	14 3HFT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4VL1 (MS)	22 4V2 (MS)
MAX.	9.00	9.00	15.30	27.00	.00	56.31	9.90	46.02	3.60	195.51	341.71
MIN.	-3.60	-3.60	-1.70	-3.70	.00	-6.86	-3.60	.00	-.90	-65.17	-156.27
MEAN	69.30	51.20	73.70	72.50	.00	176.36	43.60	185.22	48.60	516.53	1024.10
STDEV	.490	.575	1.101	1.628	.000	4.061	.709	4.169	.572	19.465	36.478

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 4V5 (MS)
MAX.	46.55	176.20	121.03	111.72	89.79	63.79	93.10	102.41	74.48	65.17	5.80
MIN.	-186.20	-55.86	-27.93	-37.24	-5.31	-9.31	-46.55	-37.24	-18.62	-27.93	-3.48
MEAN	577.22	605.15	512.05	351.02	437.57	484.12	605.15	595.84	566.53	566.53	140.36
STDEV	20.024	22.774	14.700	14.711	9.058	8.609	15.696	16.601	11.402	9.713	1.475

CH. NAME	34 C2 (PS)	35 C3 (MS)	36 L1 (MS)	37 C1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 (TONS)	42 A2 (TONS)	43 A3 (TONS)	44 A4 (TONS)
MAX.	2.32	4.64	27.00	10.29	10.29	.10	.06	8.62	5.03	9.33	14.36
MIN.	-2.32	-4.64	-6.00	-13.72	-24.01	-1.16	-.07	-7.90	-6.46	-7.90	-13.64
MEAN	143.84	142.88	466.00	435.61	439.64	1.39	.61	101.96	107.70	105.55	100.52
STDEV	.697	1.669	4.039	3.336	4.416	.033	.019	2.104	1.482	1.888	3.226

SUMMARY OF STATISTICAL DATA FOR FG 30 - 5
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 166
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIPECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 A1 (MPH)	2 A2 (SEC)	3 1HL1 (MS)	4 1HT1 (PS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (PS)	10 3HT2 (MS)	11 3HLL1 (MS)
MAX.	37.66	155.60	.00	3.00	89.18	2.70	30.87	5.90	34.30	2.70	4.50
MIN.	20.74	.00	.00	-2.70	-3.43	-1.30	-3.43	-1.60	-3.43	-1.90	.00
MEAN	28.71	150.52	.00	40.50	174.36	42.30	144.06	53.10	185.65	51.30	45.90
STDEV	3.187	28.757	.000	.739	5.312	.541	2.046	.624	4.280	.603	.514

CH. NAME	12 3HL2 (MS)	13 3HT2 (PS)	14 3HLL1 (MS)	15 3HT2 (PS)	16 3HT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	24.30	16.20	5.10	40.50	.00	41.16	15.30	65.17	7.20	121.03	204.62
MIN.	-1.80	-1.10	-4.50	-2.70	.00	-3.43	-1.80	-3.43	-7.20	-37.24	-55.66
MEAN	67.50	50.40	72.00	73.00	.00	174.93	47.70	185.22	48.60	555.84	1014.79
STDEV	1.282	.112	1.737	2.793	.000	3.553	.780	4.376	1.480	17.768	27.418

CH. NAME	23 2V1 (MS)	24 2V2 (PS)	25 3V1 (MS)	26 3V2 (PS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	27.93	111.72	111.72	102.41	74.48	74.48	102.41	111.72	83.79	65.17	3.46
MIN.	-171.03	-46.55	-37.24	-37.24	-9.31	-9.31	-37.24	-27.93	-18.62	-27.93	-3.46
MEAN	577.22	605.15	521.36	351.02	437.57	484.12	605.15	545.84	516.53	506.53	142.66
STDEV	17.526	19.688	16.273	18.373	7.621	7.710	15.025	15.569	10.477	8.311	1.444

CH. NAME	34 C2 (MS)	35 C3 (PS)	36 L1 (MS)	37 S1 (PS)	38 S2 (MS)	39 F1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	4.64	3.48	30.00	6.66	13.72	.11	.08	5.74	6.46	7.90	11.49
MIN.	-2.32	-3.48	-15.00	-13.72	-20.58	-1.19	-1.15	-6.46	-6.46	-6.62	-11.49
MEAN	135.20	142.84	483.00	435.61	435.61	1.37	.61	104.63	109.14	107.70	104.63
STDEV	.979	1.625	4.433	2.417	4.063	.037	.023	1.535	1.208	1.321	2.105

SUMMARY OF STATISTICAL DATA FOR EC 30 - 6
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPF 167
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 (MPH)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	27.00	209.37	.00	5.40	777.83	6.10	209.23	31.50	144.65	11.70	62.10
MIN.	22.65	.00	.00	-2.70	-27.44	-5.40	-13.72	-3.60	-17.15	-1.60	-4.50
MEAN	25.67	149.55	.00	49.50	202.37	41.40	150.52	54.00	202.37	52.20	49.50
STDEV	2.643	49.532	.000	1.215	44.497	1.605	26.133	2.648	26.493	2.240	7.700

CH. NAME	12 3HFL2 (MS)	13 3HPL3 (MS)	14 3HRT1 (MS)	15 3HFT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	61.20	62.10	65.70	45.00	.00	315.56	26.10	184.65	10.80	316.54	586.53
MIN.	-4.50	-3.60	-5.40	-13.50	.00	-20.58	-4.50	-17.15	-2.70	-111.72	-204.82
MEAN	70.20	52.20	76.50	73.50	.00	195.51	47.70	185.94	52.20	605.15	1052.03
STDEV	6.777	7.113	7.706	4.501	.000	37.493	1.924	29.430	2.523	61.290	116.114

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	23.79	316.54	269.95	260.68	158.27	158.27	297.92	297.92	232.75	204.92	9.28
MIN.	-307.23	-102.41	-55.17	-65.17	-27.93	-27.93	-83.79	-65.17	-55.86	-46.55	-5.60
MEAN	558.60	614.46	530.67	400.33	446.88	493.43	614.46	609.15	586.53	586.53	141.52
STDEV	58.441	61.420	56.143	55.127	26.395	25.556	52.075	52.152	31.717	28.146	1.860

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (PS)	38 C2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 T1 (TONS)	42 A2 (TONS)	43 T3 (TONS)	44 T4 (TONS)
MAX.	6.95	11.60	66.00	13.72	48.02	.19	.21	18.67	15.80	22.26	25.65
MIN.	-6.96	-5.26	-36.00	-27.44	-48.02	-29	-30	-20.10	-14.67	-20.82	-30.16
MEAN	135.20	143.84	483.00	432.14	435.61	1.37	.51	105.55	107.70	105.55	105.55
STDEV	1.454	3.767	8.237	5.874	13.127	.066	.081	5.467	4.619	6.011	7.443

SUMMARY OF STATISTICAL DATA FOR FC 30 - 9
 TIME 14 01 MINUTE INTERVALS FROM START OF TDPF 170
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE AN DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 11 (MPS)	2 12 DFG.	3 13 (MS)	4 14 (MS)	5 15 (MS)	6 16 (MS)	7 17 (MS)	8 18 (MS)	9 19 (MS)	10 20 (MS)	11 21 (MS)
MAY.	44.02	219.34	.00	4.50	243.53	5.50	147.49	133.77	133.77	11.70	45.00
MIN.	22.65	.00	.00	-2.70	-27.44	-0.30	-13.72	-17.15	-17.15	-2.70	-5.40
MEAN	22.49	169.44	.00	45.80	202.37	37.80	133.77	154.94	154.94	51.30	46.60
STDEV	3.619	31.049	.000	1.120	44.854	1.664	25.012	26.241	26.241	2.320	7.425

CH. NAME	12 22 (MPS)	13 23 (MS)	14 24 (MS)	15 25 (MS)	16 26 (MS)	17 27 (MS)	18 28 (MS)	19 29 (MS)	20 30 (MS)	21 31 (MS)	22 32 (MS)
MAY.	48.60	50.40	56.70	24.20	.00	250.39	66.60	150.92	11.70	225.45	595.64
MIN.	-4.50	-6.30	-4.50	-3.10	.00	-41.16	-4.50	-17.15	-7.20	-111.72	-204.62
MEAN	49.30	50.40	76.50	72.00	.00	168.67	45.00	202.37	49.50	605.15	1052.03
STDEV	6.505	6.625	7.771	4.201	.000	35.635	3.067	20.650	2.756	63.220	120.034

CH. NAME	23 33 (MS)	24 34 (MS)	25 35 (MS)	26 36 (MS)	27 37 (MS)	28 38 (MS)	29 39 (MS)	30 40 (MS)	31 41 (MS)	32 42 (MS)	33 43 (MS)
MAY.	270.30	270.30	270.30	288.61	204.62	145.51	316.14	307.23	214.13	195.51	6.12
MIN.	-270.30	-53.10	-74.48	-83.70	-27.53	-27.93	-53.10	-74.48	-55.86	-55.86	-5.80
MEAN	545.29	614.46	530.67	405.64	446.68	493.43	614.46	605.15	506.53	546.53	145.00
STDEV	64.749	66.926	61.664	60.751	26.655	25.562	57.474	56.283	54.136	30.103	1.775

CH. NAME	34 44 (MS)	35 45 (MS)	36 46 (MS)	37 47 (MS)	38 48 (MS)	39 49 (MS)	40 50 (MS)	41 51 (MS)	42 52 (MS)	43 53 (MS)	44 54 (MS)
MAY.	3.48	6.24	57.00	10.20	61.74	.18	.19	10.36	14.36	23.60	31.59
MIN.	-5.30	-5.60	-30.00	-27.44	-54.68	-.22	-.32	-17.05	-17.95	-27.26	-30.87
MEAN	136.88	140.36	483.00	435.61	435.61	1.38	.52	105.55	106.68	104.43	105.55
STDEV	1.303	2.033	8.446	6.227	15.482	.059	.068	5.628	4.564	6.442	9.626

SUMMARY OF STATISTICAL DATA FOR FG 30 - 10
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPF 171
 THE MEAN VALUES OF CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 DFG	3 IHL1 (MS)	4 IHT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	9 3HT1 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	40.51	215.34	.00	3.60	144.06	46.80	72.03	72.03	6.30	21.60
MIN.	18.18	9.97	.00	-2.70	-6.86	-5.40	-3.43	-8.10	-1.60	-5.50
MEAN	27.75	170.46	.00	47.70	181.79	36.90	123.48	56.70	53.10	42.30
STDEV	4.091	14.804	.000	.003	13.538	1.274	5.364	1.267	.541	1.706

CH. NAME	12 3HF12 (PS)	13 3HFL3 (MS)	14 3HRT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HT2 (MS)	20 4HT3 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	25.20	21.60	60.30	14.40	.00	123.48	27.00	9.90	9.90	223.44	446.68
MIN.	-12.60	-9.00	-3.60	-1.00	.00	-6.86	-9.90	-4.50	-4.50	555.84	-145.96
MEAN	79.20	56.70	76.50	70.20	.00	174.93	50.40	46.80	46.80	1033.41	55.461
STDEV	2.400	1.842	1.991	1.376	.000	6.404	1.592	1.223	1.223	24.916	8.470

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	65.17	242.06	148.96	158.27	102.41	102.41	167.58	167.58	102.41	53.10	4.64
MIN.	-242.06	-55.86	-55.86	-55.86	-18.62	-18.62	-65.17	-55.86	-37.24	-46.59	-4.64
MEAN	567.91	605.15	521.36	351.02	446.88	444.12	605.15	595.84	586.53	516.53	143.84
STDEV	30.118	32.639	28.654	30.070	13.005	13.203	24.063	24.116	16.048	13.117	1.490

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 /1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	3.48	5.80	42.00	10.29	37.73	.11	.10	10.05	10.77	12.92	17.95
MIN.	-3.48	-4.64	-15.00	-13.72	-27.44	-1.19	-2.21	-14.36	-9.33	-13.64	-19.67
MEAN	136.88	145.00	460.00	435.61	435.61	1.41	.54	104.11	105.14	106.96	204.83
STDEV	1.005	1.678	5.473	4.436	6.836	.044	.039	3.130	2.501	3.186	4.451

SUMMARY OF STATISTICAL DATA FOR EC 31 - 1
 TIME 74 64 MINUTE INTERVALS FROM START OF TAPE
 THE MEAN VALUES OF CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 W2 (G)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 4HT2 (MS)	10 3HT2 (MS)	11 3HLL1 (MS)
MAX.	36.68	179.46	185.22	3.60	137.20	6.30	89.18	25.20	78.89	6.30	15.80
MIN.	22.01	65.75	-13.72	-1.80	-6.86	-1.80	-3.43	-.90	-6.86	-.90	-2.70
MEAN	25.03	159.52	13.72	44.10	181.79	33.30	109.76	47.70	188.65	50.40	41.40
STDEV	2.445	11.031	20.857	.703	15.083	.752	5.440	.519	8.476	.604	1.768

CH. NAME	12 3HRL2 (MS)	13 3HFL3 (MS)	14 3HRT1 (MS)	15 3HOT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HT2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	25.20	25.20	36.50	40.50	.00	113.19	18.90	102.50	10.80	214.13	418.95
MIN.	-3.60	-1.80	-1.80	-3.60	.00	-6.86	-.50	-3.43	-13.50	-93.79	-158.27
MEAN	28.40	47.70	73.00	68.40	.00	174.83	43.20	192.08	48.60	586.53	1024.10
STDEV	2.154	1.394	4.107	4.617	.000	10.312	1.038	8.478	1.736	30.599	57.409

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	65.17	214.13	148.96	148.96	102.41	102.41	121.03	121.03	83.79	74.48	8.12
MIN.	-214.13	-65.17	-37.24	-46.55	-1.62	-16.62	-46.55	-46.55	-37.24	-46.55	-11.60
MEAN	587.91	555.84	512.02	351.02	446.68	484.12	605.15	595.84	586.53	586.53	148.48
STDEV	33.520	35.755	26.660	27.351	13.635	13.052	21.658	21.619	15.723	12.624	3.779

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (MS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 T1 (TONS)	42 T2 (TONS)	43 T3 (TONS)	44 T4 (TONS)
MAX.	2.37	4.64	.00	10.29	17.15	.14	.14	10.05	8.62	8.62	14.36
MIN.	-3.48	-3.48	.00	-13.72	-30.87	-.23	-.19	-12.21	-10.05	-11.49	-13.64
MEAN	136.88	139.20	.00	435.61	435.61	1.41	.52	104.83	108.42	107.70	105.55
STDEV	1.065	1.745	.000	4.136	6.312	.049	.044	2.687	2.469	2.197	3.217

SUMMARY OF STATISTICAL DATA FOR FG 31 - 2
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SURFACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 W2 (DEG.)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HRL1 (MS)
MAX.	36.05	199.40	140.63	23.40	140.63	45.00	85.75	16.20	82.32	7.20	26.10
MIN.	15.46	18.94	-30.87	-1.60	-10.29	-4.50	-3.43	-4.50	-6.86	-0.90	-0.90
MEAN	27.12	149.55	44.58	44.10	195.22	31.50	106.33	47.70	118.65	50.40	35.60
STDEV	2.761	16.494	23.937	1.025	17.237	1.464	6.455	.587	10.656	.893	2.119

CH. NAME	12 3HPL2 (MS)	13 3HPL3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HPT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	79.70	25.70	54.60	126.50	.00	205.60	29.70	105.76	9.00	214.13	416.65
MIN.	-6.30	-1.80	-0.10	-0.00	.00	-89.18	-1.50	-6.86	-18.90	-74.48	-198.27
MEAN	71.10	46.00	75.20	73.80	.00	55.47	43.20	195.51	49.50	580.53	1024.10
STDEV	11.718	1.775	15.410	15.734	.000	47.582	1.277	9.590	1.553	35.503	66.873

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	5.17	214.13	106.20	186.20	102.41	107.41	148.96	145.06	111.72	102.41	4.64
MIN.	-155.51	-65.17	-95.86	-46.55	-18.62	-18.62	-55.86	-46.55	-37.24	-37.24	-3.48
MEAN	567.91	595.84	521.36	351.02	446.88	484.12	605.15	505.84	586.53	586.53	147.32
STDEV	38.277	40.519	31.984	32.530	16.090	15.731	27.459	27.448	18.398	15.450	1.496

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 L1 (MS)	38 L1 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 L1 (MS)	42 A2 (TONS)	43 A3 (TONS)	44 A4 (TONS)
MAX.	2.32	4.64	.00	13.72	27.44	.14	.15	10.77	10.77	9.33	12.21
MIN.	-4.64	-4.64	.00	-13.72	-34.30	-.29	-.21	-17.21	-10.65	-6.33	-12.92
MEAN	198.04	128.64	.00	437.81	435.61	1.41	.92	104.11	107.70	106.98	104.83
STDEV	1.108	1.567	.000	4.455	7.536	.050	.053	2.152	2.633	2.522	3.204

SUMMARY OF STATISTICAL DATA FOR EG 31 - 3 4
 TIME IN 6 MINUTE INTERVALS FROM START OF TAPE
 THE MEAN VALUES OF CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 V1 (MPH)	2 V2 FEG.	3 1HL1 (MS)	4 1MT1 (PS)	5 2HL1 (MS)	6 2MT1 (MS)	7 3HL1 (PS)	8 3MT1 (MS)	9 3HL2 (MS)	10 3MT2 (MS)	11 3HL1 (MS)
MAX.	37.64	189.43	305.27	6.30	281.26	9.90	274.40	13.50	212.66	14.40	27.30
MIN.	21.37	.00	-37.73	-2.70	-30.87	-5.40	-17.15	-3.60	-20.53	-1.60	-5.40
MEAN	25.99	149.55	44.54	45.00	205.40	33.30	116.42	48.60	202.37	52.20	43.20
STDEV	3.215	28.342	52.114	1.180	47.571	1.669	28.653	2.474	30.184	2.553	8.665

CH. NAME	12 3HS12 (PS)	13 2HRL3 (MS)	14 3HPT1 (MS)	15 3HPT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4MT1 (MS)	19 4HL2 (MS)	20 4MT2 (MS)	21 4V1 (MS)	22 4V2 (MS)
MAX.	51.90	61.00	102.60	78.30	.00	353.29	12.60	236.67	14.40	381.71	726.18
MIN.	-6.30	-3.60	-7.20	-9.00	.00	-34.30	-4.50	-20.58	-3.60	-102.41	-204.82
MEAN	71.10	44.60	79.20	70.20	.00	155.51	45.00	209.23	52.20	595.84	1033.41
STDEV	4.430	7.758	11.586	10.320	.000	45.129	1.975	34.093	3.087	66.010	126.663

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	33.10	307.23	307.23	247.02	232.75	204.82	316.54	297.92	269.99	251.37	10.44
MIN.	-307.23	-102.41	-74.44	-74.44	-27.93	-27.93	-93.10	-83.76	-65.17	-55.86	-9.28
MEAN	558.60	605.15	530.67	400.33	444.88	453.43	614.46	605.15	595.84	546.53	146.16
STDEV	63.761	64.467	62.937	61.636	30.362	29.521	60.703	58.768	30.461	35.957	1.665

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 C1 (MS)	38 C2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	8.12	9.28	.00	13.72	51.45	.21	.25	21.54	17.23	18.67	25.85
MIN.	-6.96	-7.26	.00	-27.44	-65.17	-.37	-.39	-24.41	-24.41	-22.26	-25.85
MEAN	128.04	142.66	.00	435.61	435.61	1.41	.42	106.26	107.70	106.26	107.70
STDEV	1.434	2.186	.000	6.270	17.285	.066	.078	5.742	5.056	6.140	7.840

SUMMARY OF STATISTICAL DATA FOR FG 31 - 4
 TIME IN 61 MINUTE INTERVALS FROM START OF TAPE 6
 THE MEAN VALUES OF CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE PTN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICROC - SIGMA

CH.	1	2	3	4	5	6	7	8	9	10	11
NAME	11	V2	1HL1	1HT1	2HL1	2HT1	3HL1	3HT1	3HL2	3HT2	3HPL1
MAX.	34.45	219.34	24.30	2.70	78.49	2.70	34.30	15.30	54.48	3.60	10.40
MIN.	19.14	15.64	.00	.00	-3.43	-5.40	-6.46	-3.60	-3.43	-1.40	-1.80
MEAN	29.52	189.43	.00	45.00	178.36	33.30	109.76	48.60	165.22	51.30	40.50
STDEV	7.608	14.417	1.427	.502	6.603	.539	2.592	.732	5.466	.632	.956

CH.	12	13	14	15	16	17	18	19	20	21	22
NAME	3HL2	2HL3	3HLT1	3HLT2	3HLT3	4HL1	4HT1	4V1	4V2	4V4	4V2
MAX.	21.50	27.00	53.10	72.80	.00	68.60	26.10	51.45	6.30	186.20	372.40
MIN.	-3.60	-4.50	-3.60	-3.60	.00	-3.43	-4.50	-3.43	.90	-55.86	-93.10
MEAN	67.40	46.80	75.60	60.40	.00	174.93	45.00	192.04	45.50	586.53	1014.79
STDEV	2.069	1.141	3.322	3.739	.000	6.582	1.051	4.776	.744	25.047	47.308

CH.	23	24	25	26	27	28	29	30	31	32	33
NAME	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	4V4
MAX.	55.46	159.27	111.72	111.72	83.79	93.10	130.34	130.34	93.10	74.48	4.64
MIN.	-145.66	-55.46	-37.24	-27.03	-18.62	-18.62	-37.24	-37.24	-27.93	-27.93	-4.64
MEAN	57.61	505.84	512.05	381.71	446.48	484.12	605.15	545.44	586.53	586.53	141.52
STDEV	26.003	24.335	22.021	22.642	12.609	12.172	14.807	19.477	14.440	11.784	1.397

CH.	34	35	36	37	38	39	40	41	42	43	44
NAME	2	3	4	5	6	7	8	9	10	11	12
MAX.	3.48	6.64	.00	6.64	.12	.11	.11	7.14	8.62	7.90	11.49
MIN.	-3.48	-2.32	.00	-13.72	-1.18	-2.28	-2.28	-10.05	-7.18	-4.62	-13.64
MEAN	140.36	139.20	.00	439.84	1.44	.65	.65	106.26	100.85	107.70	105.55
STDEV	.053	1.083	.000	3.645	.044	.022	.022	2.125	1.472	2.261	3.338

SUMMARY OF STATISTICAL DATA FOR EG 31 - 5
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 7
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 W2 (DEG.)	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3MT2 (MS)	11 3HRL1 (MS)
MAX.	32.54	200.37	37.73	1.80	72.03	2.70	61.74	24.30	54.68	7.20	10.80
MIN.	16.59	9.97	.00	-1.80	-3.43	-5.40	.00	-3.60	-3.43	-1.60	-1.60
MEAN	22.65	170.46	.00	45.00	170.36	32.40	106.33	40.60	188.22	51.30	40.50
STDEV	2.244	14.126	1.730	.525	7.512	.550	2.984	.626	6.520	.647	1.070

CH. NAME	12 3HFL2 (MS)	13 3HPL3 (MS)	14 3HPT1 (MS)	15 3HRT2 (MS)	16 3HRT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 3V1 (MS)	22 3V2 (MS)
MAX.	36.00	30.60	55.80	65.50	.00	75.46	35.10	61.74	6.30	150.27	207.92
MIN.	-2.70	-2.70	-2.70	-2.70	.00	-3.43	-2.70	-3.43	-1.60	-37.24	-74.48
MEAN	68.40	46.00	75.60	68.40	.00	174.93	45.00	192.06	49.50	526.53	1014.79
STDEV	2.483	1.172	4.085	5.087	.000	6.716	1.197	5.747	.666	23.435	44.537

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	37.24	121.03	121.03	130.24	102.41	102.41	130.34	130.34	93.10	74.48	3.48
MIN.	-130.24	-46.95	-37.24	-37.24	-18.62	-18.62	-55.86	-46.55	-27.93	-27.93	-2.32
MEAN	577.22	595.84	512.05	381.71	446.48	444.12	605.15	565.84	565.84	516.53	140.36
STDEV	23.656	25.540	21.627	21.784	11.450	11.292	18.977	19.145	13.774	11.132	1.413

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (PS)	39 P1 (PSI)	40 P2 (PSI)	41 TENS (PS)	42 TENS (PS)	43 TENS (PS)	44 TENS (PS)
MAX.	3.48	4.64	.00	6.86	17.15	.11	.08	5.74	5.03	7.00	12.21
MIN.	-2.32	-2.32	.00	-13.72	-24.01	-10	-14	-5.74	-5.74	-10.05	-10.77
MEAN	120.04	138.64	.00	430.84	435.61	1.44	.67	105.55	111.24	100.14	104.63
STDEV	.949	1.611	.000	2.600	4.813	.039	.035	1.480	1.224	2.054	2.954

SUMMARY OF STATISTICAL DATA FOR EG 31 - 6
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1 (MPH)	2 VEG.	3 (MS)	4 (MS)	5 (MS)	6 (MS)	7 (MS)	8 (MS)	9 (MS)	10 (MS)	11 (MS)
MAY.	22.81	199.40	17.15	1.80	48.02	2.70	116.62	38.70	41.16	2.70	9.90
MIN.	17.54	6.97	.00	-3.43	-3.43	-5.40	.00	-3.60	-3.43	-8.50	-9.90
MEAN	24.56	174.46	.00	44.10	178.36	31.50	102.90	47.70	185.22	50.40	39.60
STDEV	3.585	13.365	.514	.441	4.213	.550	4.365	1.334	4.511	.530	.653

CH. NAME	12 (MS)	13 (MS)	14 (MS)	15 (MS)	16 (MS)	17 (MS)	18 (MS)	19 (MS)	20 (MS)	21 (MS)	22 (MS)
MAY.	37.00	42.30	27.00	37.80	.00	53.31	27.00	44.50	4.50	130.34	251.37
MIN.	-7.20	-4.50	-9.00	-3.43	.00	-3.43	-3.60	-3.43	-9.90	-46.55	-102.41
MEAN	67.50	45.80	74.70	66.60	.00	174.93	44.10	182.06	49.50	577.22	1005.48
STDEV	1.580	1.495	1.146	2.020	.000	4.701	1.079	3.613	.544	21.146	39.627

CH. NAME	23 (MS)	24 (MS)	25 (MS)	26 (MS)	27 (MS)	28 (MS)	29 (MS)	30 (MS)	31 (MS)	32 (MS)	33 (MS)
MAY.	37.24	167.58	121.03	111.72	74.48	74.48	121.03	121.03	65.17	65.17	3.48
MIN.	-158.27	-46.55	-37.24	-27.93	-18.62	-9.31	-37.24	-27.93	-27.93	-27.93	-4.64
MEAN	577.22	595.84	512.05	381.71	446.89	484.12	555.84	186.53	566.53	586.53	146.16
STDEV	21.689	23.552	15.798	20.494	12.072	11.899	16.831	16.794	12.859	10.855	1.405

CH. NAME	34 (MS)	35 (MS)	36 (MS)	37 (MS)	38 (MS)	39 (PSI)	40 (PSI)	41 (PSI)	42 (PSI)	43 (PSI)	44 (TONS)
MAY.	3.49	11.60	.00	6.86	10.29	.11	.10	5.03	5.03	6.46	6.46
MIN.	-2.32	-4.64	.00	-17.15	-20.58	-1.19	-1.15	-5.74	-5.74	-7.18	-7.18
MEAN	135.20	138.04	.00	430.04	435.61	1.46	.58	105.55	110.57	108.42	104.83
STDEV	.010	3.000	.000	3.445	4.538	.040	.032	1.263	1.101	1.451	2.128

SUMMARY OF STATISTICAL DATA FOR FIG 31 - 7
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPE 14 MEANING
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
	11	W2	1H11	1HT1	2H11	2HT1	3H11	3HT1	3H12	3HT2	3H11
	(MPH)		(MS)	(PS)	(MS)	(PS)	(MS)	(PS)	(MS)	(MS)	(MS)
MAX.	34.45	199.40	154.35	3.60	171.79	6.30	126.51	22.50	62.61	7.20	35.70
MIN.	19.46	105.67	.00	-1.70	-10.29	-5.40	-13.72	-5.40	-10.29	-.90	-1.80
MEAN	26.48	169.49	.00	45.00	175.22	36.90	120.05	48.60	188.65	49.50	41.40
STDEV	2.762	5.595	5.803	.773	20.557	.830	9.238	1.085	12.140	.593	2.835

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
	3HP12	3H13	3HP11	3HP12	3HP13	4H11	4HT1	4H12	4HT2	1V1	1V2
	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	36.00	37.20	39.60	21.60	.00	144.06	16.20	123.48	5.90	266.68	474.81
MIN.	-4.50	-4.50	-1.70	-4.50	.00	-6.86	-4.50	-6.86	-2.70	-63.79	-176.85
MEAN	48.60	48.60	72.00	67.50	.00	178.36	45.90	159.51	49.50	566.53	1024.10
STDEV	2.729	2.344	2.540	2.072	.000	15.986	1.073	12.449	1.282	42.698	74.467

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	4V4
	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	65.17	260.65	242.06	247.06	130.65	135.65	251.37	251.37	146.96	135.65	10.44
MIN.	-260.60	-65.17	-93.86	-55.86	-27.53	-15.62	-74.46	-55.86	-46.55	-46.55	-10.44
MEAN	567.51	505.84	521.36	551.02	446.88	464.12	605.15	595.84	586.53	566.53	147.32
STDEV	44.591	47.456	35.419	35.422	19.240	18.861	35.984	35.614	22.431	20.364	4.405

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
	C2	C3	L1	C1	C2	P1	P2	A1	A2	A3	A4
	(MS)	(MS)	(MS)	(MS)	(MS)	(PSI)	(PSI)	TENS	TENS	TENS	TENS
MAX.	3.48	8.12	.00	10.26	41.16	.14	.15	12.21	10.05	12.21	16.51
MIN.	-4.64	-3.48	.00	-20.58	-41.16	-.25	-.25	-13.64	-10.05	-13.64	-17.95
MEAN	140.36	143.94	.00	453.61	435.61	1.49	.59	105.55	109.14	107.70	105.55
STDEV	1.084	1.749	.000	5.136	8.717	.054	.063	3.155	2.160	3.389	4.140

SUMMARY OF STATISTICAL DATA FOR EG 31 - 8
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP 112
 THE MEAN VALUES OF CHANNELS 3 THRU 44 HAVE NO DIRECT PEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MAX.	22.54	159.40	44.59	1.80	17.15	-3.43	3.43	2.70	24.01	1.80	2.70
MIN.	15.63	.00	-6.88	-.60	-3.43	-5.40	-3.43	-3.60	-.60	-.60	2.70
MEAN	22.33	159.52	349.96	45.00	179.36	43.20	150.92	55.80	159.22	49.50	44.10
STDEV	9.608	33.844	6.548	.506	1.658	.514	1.835	.534	2.504	.491	.443

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAX.	11.70	7.20	21.60	31.50	31.50	20.58	7.20	20.58	1.80	5.86	93.10
MIN.	-2.70	-.90	-2.70	-1.80	.00	-3.43	-2.70	-3.43	-.50	-37.24	-5.86
MEAN	6F.40	52.10	71.10	77.40	.00	174.93	49.50	184.65	52.20	605.15	1033.41
STDEV	.878	.575	1.395	2.012	.000	1.646	.565	1.780	.457	11.812	17.453

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAX.	27.03	65.17	66.17	65.17	46.55	37.24	46.55	37.24	37.24	37.24	3.48
MIN.	-65.17	-37.24	-37.24	-37.24	-9.31	-5.31	-18.62	-27.93	-5.31	-9.31	-2.32
MEAN	567.51	605.15	521.36	391.02	437.57	464.12	605.15	605.15	586.53	586.53	142.68
STDEV	11.689	14.511	13.597	13.891	4.701	5.027	9.406	10.147	8.099	6.653	1.558

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAX.	2.32	4.64	.00	10.29	6.86	.09	.06	3.59	2.87	2.87	73.24
MIN.	-2.32	-2.32	.00	-6.86	-10.29	-.15	-.08	-3.59	-2.15	-2.87	-13.64
MEAN	135.72	146.16	.00	437.16	435.61	1.46	.98	106.26	112.01	109.85	35.90
STDEV	.691	1.607	.000	2.715	2.918	.035	.018	.677	.733	.752	20.367

SUMMARY OF STATISTICAL DATA FOR FC 31 - C
 TIME IN 60 MINUTE INTERVALS FROM START OF TAPE 162
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = VIBRO - STRAINS

CH. NAME	1 V1 (MPH)	2 W2 DFC	3 1HL1 (MS)	4 1HT1 (MS)	5 2HL1 (MS)	6 2HT1 (MS)	7 3HL1 (MS)	8 3HT1 (MS)	9 3HL2 (MS)	10 3HT2 (MS)	11 3HL1 (MS)
MAX.	44.98	140.40	367.01	2.60	140.63	5.90	109.76	36.70	72.03	5.40	25.20
MIN.	17.86	.00	.00	.00	-6.86	-4.50	-3.43	-4.50	-6.86	-1.80	-1.60
MEAN	29.09	110.64	.00	42.30	181.79	32.40	102.50	48.60	175.22	46.50	38.70
STDEV	4.758	49.018	8.114	.669	12.501	.742	6.130	1.347	8.836	.648	1.796

CH. NAME	12 3HE12 (MS)	13 3HL3 (MS)	14 3HT1 (MS)	15 3HT2 (MS)	16 3HT3 (MS)	17 4HL1 (MS)	18 4HT1 (MS)	19 4HL2 (MS)	20 4HT2 (MS)	21 1V1 (MS)	22 1V2 (MS)
MAX.	28.70	40.50	25.20	26.10	.00	116.62	28.80	82.32	11.70	223.44	391.02
MIN.	-7.20	-5.40	-2.70	-1.00	.00	-3.43	-3.60	-3.43	-14.00	-74.48	-167.58
MEAN	65.70	46.80	54.80	68.40	.00	166.07	43.20	188.65	42.30	506.53	1014.79
STDEV	2.149	1.026	1.912	1.973	.000	11.610	1.584	6.528	6.461	31.360	50.702

CH. NAME	23 2V1 (MS)	24 2V2 (MS)	25 3V1 (MS)	26 3V2 (MS)	27 3V3 (MS)	28 3V4 (MS)	29 4V1 (MS)	30 4V2 (MS)	31 4V3 (MS)	32 4V4 (MS)	33 C1 (MS)
MAX.	55.66	125.61	159.27	158.27	102.41	102.41	167.58	194.27	93.10	83.79	10.44
MIN.	-186.20	-65.17	-37.24	-46.55	-27.53	-18.62	-46.55	-55.86	-27.93	-37.24	-4.64
MEAN	567.91	595.84	512.05	351.02	446.88	444.12	595.84	505.84	586.53	586.53	141.52
STDEV	30.773	33.063	20.632	30.420	14.439	14.449	25.324	26.351	16.681	14.036	1.669

CH. NAME	34 C2 (MS)	35 C3 (MS)	36 L1 (MS)	37 S1 (PS)	38 S2 (MS)	39 P1 (PSI)	40 P2 (PSI)	41 A1 TONS	42 A2 TONS	43 A3 TONS	44 A4 TONS
MAX.	5.80	12.76	.00	10.29	24.01	.12	.14	10.77	7.18	9.33	132.11
MIN.	-4.64	-5.60	.00	-13.72	-30.87	-.25	-.23	-6.13	-7.60	-6.33	-45.95
MEAN	128.76	130.20	.00	439.61	437.18	1.46	.57	111.24	114.16	117.73	46.67
STDEV	1.106	3.542	.000	4.879	6.375	.049	.036	2.766	2.296	2.037	20.714

SUMMARY OF STATISTICAL DATA FOR FG 31 - 10
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP 163
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT PEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICR - STEAINS

CH. NAME	1 (PPH)	2 NEG.	3 (MS)	4 (PS)	5 (MS)	6 (MS)	7 (MS)	8 (MS)	9 (MS)	10 (MS)	11 (MS)
MAX.	36.05	325.01	.00	4.50	137.20	4.50	68.60	26.80	65.17	5.40	22.50
MIN.	16.51	.00	.00	-2.70	-6.30	-6.30	-13.72	-3.60	-6.86	-1.20	-2.70
MEAN	24.49	149.55	.00	45.00	181.79	36.90	113.19	50.40	185.22	51.30	39.60
STDEV	7.524	51.223	.000	1.257	13.160	.735	5.339	1.238	6.550	.663	1.718

CH. NAME	12 (PS)	13 (MS)	14 (MS)	15 (PS)	16 (MS)	17 (MS)	18 (MS)	19 (MS)	20 (MS)	21 (MS)	22 (MS)
MAX.	72.90	45.00	26.10	17.10	.00	106.33	50.40	78.89	9.90	176.89	344.47
MIN.	-2.70	-2.70	-5.00	-2.70	.00	-6.86	-2.70	-3.43	-3.60	-83.79	-139.65
MEAN	67.50	48.60	52.20	70.20	.00	166.07	45.00	185.22	45.90	555.84	1024.10
STDEV	2.677	2.046	3.856	1.479	.000	11.890	2.062	6.888	.651	32.406	55.940

CH. NAME	23 (PS)	24 (MS)	25 (MS)	26 (MS)	27 (MS)	28 (MS)	29 (MS)	30 (MS)	31 (MS)	32 (MS)	33 (MS)
MAX.	59.86	176.99	195.51	176.89	92.10	102.41	139.65	130.34	111.72	53.10	4.64
MIN.	-176.80	-46.55	-46.55	-37.24	-27.93	-18.62	-55.86	-46.55	-46.55	-40.55	-9.28
MEAN	967.01	295.54	521.36	351.02	446.88	484.12	605.15	545.84	586.53	586.53	148.48
STDEV	32.454	34.577	30.502	30.784	13.772	13.364	26.235	27.151	17.368	14.497	1.561

CH. NAME	34 (MS)	35 (PS)	36 (MS)	37 (MS)	38 (MS)	39 (PS)	40 (PS)	41 (TONS)	42 (TONS)	43 (TONS)	44 (TONS)
MAX.	2.32	4.64	.00	10.29	17.15	.12	.12	10.05	9.33	10.77	141.45
MIN.	-3.48	-4.64	.00	-13.77	-27.44	-.21	-.23	-9.33	-7.90	-6.62	-25.13
MEAN	191.08	141.52	.00	435.61	432.18	1.48	.98	109.65	114.16	112.73	38.05
STDEV	1.025	1.652	.000	4.336	6.461	.047	.045	2.491	2.168	2.499	9.480

SUMMARY OF STATISTICAL DATA FOR PG 32 - 1
 TIME IN 66 MINUTE INTERVALS FROM START OF TAP 15
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
	V1	V2	1HL1	1HT1	2HL1	2HT1	3HL1	3HT1	3HL2	3HT2	3HL1
MAX.	34.13	109.40	72.03	7.70	41.16	1.40	20.56	13.50	27.44	1.90	5.40
MIN.	14.04	19.54	-10.95	.00	-3.43	-4.50	-3.43	-3.60	-3.43	-.90	-1.80
MEAN	20.74	150.45	336.14	44.10	181.79	52.20	178.36	53.10	154.94	46.80	48.60
STDEV	4.433	13.606	8.233	.475	2.650	.599	1.762	.684	3.574	.508	.604

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
	3HL2	3HL3	3HL1	3HT2	3HT3	4HL1	4HT1	4HL2	4HT2	1V1	1V2
MAX.	26.10	22.50	30.60	12.60	.00	37.73	24.30	30.87	4.50	102.41	196.20
MIN.	-8.10	-5.40	-F.10	-.50	.00	-3.43	-3.60	-3.43	-17.10	-27.93	-55.66
MEAN	64.80	5F.50	25.20	46.50	.00	192.08	52.20	152.08	38.70	577.22	1014.79
STDEV	1.470	1.158	6.850	.463	.000	3.108	1.116	2.312	1.504	17.829	22.026

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
	PV1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	C1
MAX.	37.24	111.72	93.10	52.10	65.17	65.17	74.44	74.44	63.79	74.44	3.48
MIN.	-102.41	-37.24	-27.03	-27.03	-18.62	-18.62	-27.53	-27.93	-12.62	-18.62	-3.48
MEAN	577.22	546.53	512.05	441.71	446.66	454.12	505.64	546.53	586.53	586.53	141.52
STDEV	17.592	19.231	17.054	17.536	8.819	9.022	14.053	15.297	12.131	9.411	1.542

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
	C2	C2	L1	C1	C2	P1	P2	TONS	TENS	TONS	TCNS
MAX.	2.92	3.48	27.00	17.29	10.29	.10	.11	3.59	3.59	2.15	.00
MIN.	-3.48	-3.48	-9.00	-10.29	-17.15	-2.22	-1.10	-5.74	-3.59	-4.31	.00
MEAN	131.06	140.36	378.00	435.61	435.61	1.44	.45	107.70	113.44	112.01	.00
STDEV	.675	1.768	5.364	3.153	4.049	.045	.025	1.215	.927	.732	.000

SUMMARY OF STATISTICAL DATA FOR FC 32 - 2 18
 TIME IN 66 MINUTE INTERVALS FROM START OF TAP
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (PS) = MICRO - STRATAS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MAX. (MPH)	23.49	189.43	133.77	4.50	54.68	2.70	130.24	40.50	54.88	6.30	15.00
MIN. (MPH)	16.51	CC	-13.72	-2.70	-3.43	-4.50	-17.15	-4.50	-3.43	-1.60	-2.70
MEAN	25.20	119.64	105.51	47.70	178.36	57.60	159.51	55.80	158.94	48.60	50.40
STDEV	3.337	67.866	12.934	1.195	5.612	.682	4.303	1.225	5.759	.599	.888

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAX. (MS)	53.10	44.10	36.00	38.70	.00	65.18	36.00	51.45	10.80	121.03	242.06
MIN. (MS)	-3.60	-3.60	-11.70	-3.60	.00	-3.43	-2.70	-3.43	-9.90	-37.24	-55.86
MEAN	66.60	60.30	35.10	54.00	.00	105.51	54.00	192.08	37.80	586.53	1014.79
STDEV	1.620	1.695	8.065	1.465	.000	5.982	1.450	3.692	3.389	22.156	39.309

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAX. (MS)	46.55	139.65	135.65	121.03	83.79	63.10	102.41	111.72	83.79	65.17	5.80
MIN. (MS)	-130.34	-46.55	-27.93	-37.24	-9.31	-14.62	-37.24	-37.24	-27.93	-27.93	-6.96
MEAN	567.51	595.84	512.05	391.02	437.57	484.12	605.15	595.64	586.53	586.53	147.32
STDEV	24.215	26.572	21.254	21.800	10.114	10.082	17.625	16.736	13.192	11.059	1.554

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAX. (MS)	6.96	6.56	42.00	10.29	13.72	.11	.11	6.46	6.46	5.74	.00
MIN. (MS)	-3.44	-3.44	-12.00	-13.72	-24.01	-.23	-.15	-8.02	-6.46	-5.74	.00
MEAN	126.76	142.68	381.00	435.61	435.61	1.44	.57	108.42	112.73	111.29	.00
STDEV	1.415	1.770	6.142	3.601	4.689	.048	.032	1.608	1.575	1.382	.000

SUMMARY OF STATISTICAL DATA FOR FIG 32 - 5
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP 21
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STPAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MAX. (MPH)	40.19	159.40	246.06	5.40	250.39	5.00	130.34	13.50	120.05	11.76	41.40
MIN. (MS)	18.18	.00	-34.90	-1.90	-24.01	-6.30	-13.72	-9.90	-17.15	-1.40	-4.50
MEAN	30.62	129.61	229.81	47.70	198.94	56.70	192.08	63.00	212.66	49.50	51.30
STDEV	3.720	53.634	46.401	1.138	30.205	1.382	22.246	2.197	23.758	2.195	7.326

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAX. (MS)	42.30	36.90	44.90	61.00	.00	188.65	9.00	154.35	16.20	307.23	595.84
MIN. (MS)	-13.50	-10.90	-13.50	-20.70	.00	-20.58	-9.90	-17.15	-14.90	-102.41	-195.51
MEAN	9.10	71.10	76.90	66.40	.00	222.95	56.50	209.23	45.50	595.84	1042.72
STDEV	7.096	4.974	15.118	18.120	.000	34.034	1.701	27.462	4.173	66.182	126.250

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAX. (MS)	13.79	207.92	307.23	278.71	167.59	158.27	307.23	277.61	223.44	195.51	13.92
MIN. (MS)	-316.54	-102.41	-65.17	-65.17	-27.93	-93.79	-93.79	-74.48	-55.86	-55.86	-5.80
MEAN	558.60	614.46	530.67	400.33	446.88	493.43	605.15	605.15	576.53	587.53	143.84
STDEV	66.610	66.558	58.145	56.991	27.077	26.536	59.906	57.545	33.779	30.013	1.760

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAX. (MS)	4.64	10.44	57.00	10.70	44.59	.18	.21	14.36	17.23	24.41	.00
MIN. (MS)	-F.12	-6.96	-42.00	-27.44	-48.02	-.36	-.43	-19.39	-16.67	-25.85	.00
MEAN	120.92	141.52	361.00	435.61	435.61	1.45	.58	110.57	112.01	109.85	.00
STDEV	1.400	2.111	9.727	6.038	13.736	.064	.076	5.742	4.866	6.229	.000

SUMMARY OF STATISTICAL DATA FOR
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICRO - STRAINS

FIG 32 - 6
 23

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MAY.	33.19	210.34	137.20	3.60	123.48	5.40	85.75	13.50	61.74	7.20	27.00
MIN.	14.67	.00	-13.72	-1.40	-3.43	-4.50	-6.86	-5.00	-6.36	-5.50	-1.80
MEAN	22.05	149.55	146.07	47.70	178.36	56.70	188.65	63.00	202.37	44.60	50.40
STDEV	2.995	46.578	18.454	.652	11.502	.649	5.353	.641	7.703	.761	1.975

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAY.	24.30	23.40	35.10	17.10	.00	105.76	20.70	106.33	12.60	223.44	400.33
MIN.	-2.70	-5.40	-7.20	-1.80	.00	-6.86	-10.80	-3.43	-.90	-63.79	-159.27
MEAN	76.50	70.20	40.50	55.80	.00	205.23	59.40	108.04	35.60	586.53	1024.10
STDEV	1.544	1.221	6.926	1.089	.000	10.027	.976	8.045	.644	33.127	63.222

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAY.	65.17	155.51	186.20	186.70	102.41	102.41	186.20	186.20	121.03	102.41	6.56
MIN.	-155.51	-13.79	-55.86	-55.86	-18.62	-27.93	-65.17	-55.86	-46.55	-37.24	-3.48
MEAN	567.91	609.15	521.36	351.02	446.88	453.43	595.84	595.84	586.53	586.53	141.52
STDEV	33.715	36.282	34.423	34.632	16.468	16.098	31.337	31.066	15.186	15.915	1.436

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAY.	3.48	5.10	45.00	10.20	46.30	.12	.14	6.62	8.62	6.62	.00
MIN.	-4.64	-4.64	-5.00	-17.15	-30.67	-.18	-.22	-12.21	-10.05	-12.21	.00
MEAN	121.09	141.52	381.00	435.61	435.61	1.46	.99	107.70	113.44	110.57	.00
STDEV	.887	1.612	5.400	4.505	7.179	.046	.048	2.503	2.296	2.732	.000

SUMMARY OF STATISTICAL DATA FOR FC 33 - 2
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE NO EFFECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) - MICROC - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
	11	12	1HL1	1HT1	2HL1	2HT1	3HL1	3HT1	3HL2	3HT2	3HRL1
MAX.	41.47	209.37	130.34	2.70	126.91	4.50	92.32	0.00	78.69	7.20	27.40
MIN.	16.27	76.76	-26.87	-1.18	-6.86	-4.10	-6.86	-3.60	-6.86	-0.90	-1.80
MEAN	26.48	179.46	202.37	45.00	181.79	51.30	174.53	51.30	158.94	46.30	47.70
STDEV	4.488	12.572	17.854	.633	10.142	.730	5.303	.767	7.970	.728	1.977

CH. NAME	12	13	14	15	14	17	19	15	20	21	22
	3HP12	3HP13	3HP14	3HP15	3HP13	4HL1	4HT1	4HL2	4HT2	1V1	1V2
MAX.	23.40	21.60	27.00	16.20	.00	130.34	11.70	92.61	53.10	214.13	400.33
MIN.	-7.20	-2.74	-4.50	-2.70	.00	-3.43	-2.70	-3.43	-0.90	-74.43	-134.65
MEAN	65.70	58.50	67.50	51.30	.00	205.40	47.50	198.94	.90	581.53	1024.10
STDEV	1.529	1.127	1.625	1.412	.000	10.606	.860	7.469	3.415	31.570	59.530

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	4V4
MAX.	65.17	145.91	132.65	120.65	93.10	102.41	176.89	167.56	102.41	13.75	5.90
MIN.	-166.20	-65.17	-46.55	-37.24	-18.62	-18.62	-55.16	-46.55	-37.24	-37.24	-3.48
MEAN	567.91	595.84	521.36	391.12	446.86	484.12	595.14	516.53	586.53	566.53	142.68
STDEV	32.317	34.390	27.761	26.478	14.195	14.120	24.669	24.614	15.459	12.383	1.463

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
	1C2	1C2	1L1	1C1	1C2	1P1	1P2	1A1	1A2	1A3	1A4
MAX.	3.48	5.80	71.00	10.20	17.15	.14	.11	7.90	6.46	8.62	34.46
MIN.	-2.32	-3.48	-18.00	-13.72	-27.44	-.18	-.14	-10.05	-7.18	-12.92	-33.75
MEAN	126.76	140.36	384.00	435.41	435.61	1.42	.44	114.88	117.91	117.75	46.67
STDEV	.967	1.627	7.044	3.842	5.817	.046	.035	2.453	1.932	2.195	6.448

SUMMARY OF STATISTICAL DATA FOR
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPE
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SURTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MAX.	44.02	0.66	212.66	5.40	171.50	7.20	154.35	12.60	126.91	9.90	48.60
MIN.	21.05	.00	-48.02	-.00	-13.72	-5.40	-6.66	-5.40	-10.29	-.90	-2.70
MEAN	31.26	159.52	243.53	45.00	188.65	45.50	164.07	52.20	202.37	45.50	46.60
STDEV	3.755	19.773	24.156	1.073	26.765	1.009	16.379	1.573	17.022	1.326	5.519

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAX.	43.20	41.40	53.10	27.00	.00	222.45	10.80	164.07	35.60	297.92	567.91
MIN.	-8.10	-5.40	-11.70	-7.20	.00	-13.72	-3.60	-10.29	.00	-93.10	-176.89
MEAN	66.60	59.40	39.60	40.50	.00	212.66	49.50	205.60	.00	546.53	1024.10
STDEV	3.031	3.837	8.067	2.658	.000	25.220	1.431	20.167	2.232	53.370	99.445

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAX.	74.49	270.30	269.09	270.30	150.27	156.27	232.75	223.44	192.51	176.69	8.12
MIN.	-279.30	-43.79	-55.86	-55.86	-27.53	-18.62	-65.17	-65.17	-55.86	-46.55	-5.60
MEAN	547.91	595.84	521.36	351.02	446.68	484.12	595.84	595.84	586.53	560.53	141.52
STDEV	51.078	53.390	44.745	45.375	23.497	23.003	42.578	41.421	25.409	22.359	1.559

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAX.	4.64	6.96	66.00	10.20	41.16	.25	.21	15.06	11.49	15.08	38.05
MIN.	-5.30	-5.00	-30.00	-17.15	-41.16	-.26	-.30	-15.06	-15.80	-16.51	-42.36
MEAN	125.28	134.04	381.00	435.61	435.61	1.42	.94	116.47	114.19	117.75	54.57
STDEV	1.243	1.858	9.530	2.164	9.407	.060	.069	3.777	3.303	3.936	10.135

SUMMARY OF STATISTICAL DATA FOR
 TIME 7M 6E MINUTE INTERVALS FROM START OF TDRP
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
	W1	W2	3HL1	3HT1	2HL1	2HT1	3HL1	3HT1	3HL2	3HT2	3HRL1
	(MPH)	FEED	(MS)	(PS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)	(MS)
MAX.	38.28	219.34	171.5C	-17.15	130.34	-5.40	42.32	26.10	56.31	5.40	27.00
MIN.	19.14	149.95	-17.15	-1.40	-6.46	-5.40	-3.43	-2.70	-6.46	-0.50	-1.60
MEAN	27.12	170.46	219.52	45.00	181.79	46.60	157.78	51.30	198.94	45.90	44.10
STDEV	3.455	9.156	22.022	.821	13.648	.728	5.453	1.026	10.048	.922	2.115

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
	3HP12	3HRL3	3HP11	3HET2	3HP13	4HL1	4HT1	4HL2	4HT2	1V1	1V2
	(PS)	(MS)	(MS)	(PS)	(MS)	(MS)	(MS)	(MS)	(PS)	(MS)	(MS)
MAX.	23.40	27.40	40.50	17.10	.00	53.75	14.40	75.46	10.80	242.06	456.19
MIN.	-2.70	-.90	-7.20	-2.70	.00	-6.86	-2.70	-6.86	-7.20	-63.79	-158.27
MEAN	64.80	55.40	37.80	44.60	.00	205.23	49.50	202.37	7.20	546.53	1024.10
STDEV	1.441	1.208	7.306	1.342	.000	11.598	.978	9.430	2.916	39.019	71.944

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	4V4
	(PS)	(MS)	(PS)	(PS)	(MS)	(MS)	(PS)	(MS)	(PS)	(MS)	(MS)
MAX.	65.17	223.44	176.86	176.49	111.72	111.72	176.49	176.49	102.41	93.10	12.76
MIN.	-155.51	-69.17	-55.96	-55.46	-27.93	-15.62	-55.46	-46.55	-46.55	-46.55	-8.12
MEAN	567.91	595.84	521.36	351.02	446.88	404.12	595.64	586.53	586.53	586.53	145.00
STDEV	39.224	42.314	35.710	36.578	18.068	17.746	31.945	31.661	14.620	16.230	5.405

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
	C2	C3	L1	S1	S2	P1	P2	TH1S	TH2S	TH3S	TH4S
	(MS)	(MS)	(MS)	(MS)	(MS)	(PS)	(PS)	(PS)	(PS)	(PS)	(PS)
MAX.	2.32	5.90	57.00	10.29	30.87	.12	.11	12.21	7.12	14.36	109.14
MIN.	-3.44	-3.46	-24.00	-17.15	-34.30	-.19	-.18	-9.33	-10.05	-12.21	-63.18
MEAN	126.44	136.48	351.00	435.41	435.61	1.444	.95	118.47	121.34	118.47	63.40
STDEV	.896	1.613	8.198	4.355	7.748	.047	.044	2.785	2.245	3.606	25.704

SUMMARY OF STATISTICAL DATA FOR FIG 33 - 5 6
 TIME IN 60 MINUTE INTERVALS FROM START OF TAP
 THE MEAN VALUES IN CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STRAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
MAX.	35.09	200.37	106.33	2.70	72.49	3.60	24.01	2.70	50.31	4.50	10.80
MIN.	16.01	119.64	-6.46	-1.50	-3.43	-4.50	-3.43	-3.60	-6.36	-1.90	-1.90
MEAN	24.88	170.46	209.80	45.00	178.36	46.60	157.78	50.40	158.94	45.90	45.00
STDEV	3.321	6.741	12.596	.5F3	6.150	.609	2.402	.510	5.716	.590	.840

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
MAX.	0.00	4.50	5.10	14.40	14.40	78.49	4.50	4.50	5.40	144.96	260.68
MIN.	-6.30	-2.70	-26.60	-1.00	-1.00	-3.43	-4.50	-4.50	.00	-27.93	-74.48
MEAN	65.70	56.70	63.90	4F.60	4F.60	205.60	49.50	196.64	.00	577.22	1014.79
STDEV	.829	.586	1.037	1.006	1.006	5.190	.607	4.533	.119	24.791	46.490

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
MAX.	46.55	167.58	121.03	121.03	65.17	74.48	03.10	102.41	74.48	65.17	4.64
MIN.	-157.27	-37.24	-37.24	-37.24	-14.62	-18.62	-27.93	-27.93	-27.93	-27.93	-3.48
MEAN	577.22	576.53	521.76	501.02	446.68	484.12	595.64	586.53	586.53	586.53	147.32
STDEV	24.456	26.558	24.225	24.500	11.576	11.393	20.759	20.555	14.539	11.562	1.471

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
MAX.	2.32	2.48	45.00	10.20	10.29	.14	.11	7.90	6.46	7.90	21.54
MIN.	-2.32	-5.80	-30.00	-12.72	-27.44	-.25	-.18	-7.18	-5.74	-9.62	-23.69
MEAN	127.60	141.52	384.00	435.61	435.61	1.45	.97	116.47	122.74	119.91	53.65
STDEV	.920	1.721	6.824	3.700	5.031	.045	.037	1.664	1.503	1.757	4.910

SUMMARY OF STATISTICAL DATA FOR FIG 33 - 6 7
 TIME IN 66 MINUTE INTERVALS FROM START OF TAPE
 THE MEAN VALUES ON CHANNELS 3 THRU 44 HAVE NO DIRECT MEANING
 THESE MEAN VALUES HAVE BEEN SUBTRACTED FROM THE MIN. AND MAX. VALUES FOR THESE CHANNELS
 (MS) = MICRO - STAINS

CH. NAME	1	2	3	4	5	6	7	8	9	10	11
	1L1	2L1	3L1	4L1	5L1	6L1	7L1	8L1	9L1	10L1	11L1
MAX.	37.32	209.37	102.60	2.70	140.63	2.70	54.88	6.30	65.17	5.40	15.60
MIN.	14.59	.00	-10.70	.00	-3.43	-6.30	-6.46	-4.50	-6.26	.00	-1.60
MEAN	21.69	169.49	202.37	45.00	178.36	49.50	161.21	51.30	198.94	45.90	45.90
STDEV	9.109	21.903	14.657	.505	9.306	.590	3.262	.580	6.528	.767	1.192

CH. NAME	12	13	14	15	16	17	18	19	20	21	22
	3H12	3H13	3H14	3H15	3H16	4H17	4H18	4H19	4H20	3V1	3V2
MAX.	14.40	11.70	14.40	9.00	.00	65.75	11.70	61.74	.00	260.68	465.50
MIN.	-8.10	-5.40	-1.90	-.90	.00	-3.43	-4.50	-3.43	.00	-74.48	-130.34
MEAN	65.70	57.60	63.00	49.60	.00	205.80	49.50	198.94	.00	566.53	1014.79
STDEV	1.000	.711	1.016	1.006	.000	9.023	.739	6.083	.000	31.188	59.360

CH. NAME	23	24	25	26	27	28	29	30	31	32	33
	2V1	2V2	3V1	3V2	3V3	3V4	4V1	4V2	4V3	4V4	3C1
MAX.	65.17	214.13	109.65	148.06	92.10	102.41	149.06	148.96	63.79	83.79	4.64
MIN.	-223.44	-65.17	-46.55	-46.55	-27.93	-19.62	-46.55	-46.55	-37.24	-37.24	-4.64
MEAN	577.32	505.84	521.36	351.02	446.88	484.12	505.64	586.53	586.53	586.53	146.16
STDEV	30.571	33.146	29.475	30.740	14.977	15.034	26.058	26.034	17.085	14.736	1.400

CH. NAME	34	35	36	37	38	39	40	41	42	43	44
	C2	C3	L1	T1	S2	P1	P2	A1	A2	TONS	TONS
MAX.	2.32	5.50	48.00	10.29	17.15	.11	.14	10.05	7.16	10.05	125.65
MIN.	-2.32	-3.44	-15.00	-13.72	-30.07	-.15	-.17	-7.90	-6.46	-10.77	-53.85
MEAN	127.60	139.20	381.00	435.61	435.61	1.46	.57	118.47	122.78	115.91	53.85
STDEV	.574	1.608	6.761	4.004	6.224	.040	.043	2.124	1.697	2.729	12.218