NASA CONTRACTOR REPORT

NASA CR-2367

NASA CR-2367

THE EFFECTS OF BEDREST ON CREW PERFORMANCE DURING SIMULATED SHUTTLE REENTRY

Volume II: Control Task Performance

by Henry R. Jex, Richard A. Peters, Richard J. DiMarco, and R. Wade Allen

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION • WASHINGTON, D. C. • OCTOBER 1974

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
NASA CR 2367		

4. Title and Subtitle	5. Report Date
"The Effects of Bedrest on Crew Performance During Simulated Shuttle Reentry" Volume II: Control Task Performance	OCTOBER 1974
	6. Performing Organization Code

7. Author(s)	8. Performing Organization Report No.
Henry R. Jex, Richard A. Peters, Richard J. DiMarco, and R. Wade Allen	
	10. Work Unit No.

9. Performing Organization Name and Address	11. Contract or Grant No.
Systems Technology, Inc. 13766 South Hawthorne Boulevard Hawthorne, California 90250	NAS 2-6409
	13. Type of Report and Period Covered
12. Sponsoring Agency Name and Address	Contractor Report/Final
National Aeronautics and Space Administration Washington, D.C. 20546	14. Sponsoring Agency Code

15. Supplementary Notes

16. Abstract

This report describes a simplified space shuttle reentry simulation performed on the NASA Ames Research Center Centrifuge. Anticipating potentially deleterious effects of physiological deconditioning from orbital living (simulated here by 10 days of enforced bedrest) upon a shuttle pilot's ability to manually control his aircraft (should that be necessary in an emergency) a comprehensive battery of measurements was made roughly every 1/2 minute on eight military pilot subjects, over two 20-minute reentry G_z vs. time profiles, one peaking at 2 G_z and the other at 3 G_z. Alternate runs were made without and with g-suits to test the help or interference offered by such protective devices to manual control performance. A very demanding two-axis control task was employed, with a "subcritical instability" in the pitch axis to force a high attentional demand and a severe loss-of-control penalty. The results show that pilots experienced in high G_z flying can easily handle the shuttle manual control task during 2 G_z or 3 G_z reentry profiles, provided the degree of physiological deconditioning is no more than induced by these 10 days of enforced bedrest.

17. Key Words (Suggested by Author(s))	18. Distribution Statement
Space shuttle Pilot performance Physiological deconditioning Reentry	UNCLASSIFIED-UNLIMITED CAT. 05

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price*
UNCLASSIFIED	UNCLASSIFIED	97	$4.00

*For sale by the National Technical Information Service, Springfield, Virginia 22151

ABSTRACT

This report describes a simplified space shuttle reentry simulation performed on the NASA Ames Research Center Centrifuge. Anticipating potentially deleterious effects of physiological deconditioning from orbital living (simulated here by 10 days of enforced bedrest) upon a shuttle pilot's ability to manually control his aircraft (should that be necessary in an emergency) a comprehensive battery of measurements was made roughly every 1/2 minute on eight military pilot subjects, over two 20-minute reentry G_Z vs. time profiles, one peaking at 2 G_Z and the other at 3 G_Z. Alternate runs were made without and with g-suits to test the help or interference offered by such protective devices to manual control performance. A very demanding two-axis control task was employed, with a "subcritical instability" in the pitch axis to force a high attentional demand and a severe loss-of-control penalty. The results show that pilots experienced in high G_Z flying can easily handle the shuttle manual control task during 2 G_Z or 3 G_Z reentry profiles, provided the degree of physiological deconditioning is no more than induced by these 10 days of enforced bedrest.

FOREWORD

The research reported here was part of a joint program sponsored by the Environmental Control Branch, Biotechnology Divison, NASA Ames Research Center, who: performed the experiment on their Flight & Guidance Centrifuge; selected, trained and tested the subjects; and made numerous other biomedical measurements, reported separately (Ref. 1). Systems Technology, Inc., under Contract NAS2-6409 (Modifications 2 and 3) with Dr. Alan Chambers as NASA Project Monitor: developed the manual control tasks, programs, and measures; and analyzed the data reported here. The Contractor's Technical Director was Duane T. McRuer, and the Project Engineer was Henry R. Jex.

The authors would like to thank the key NASA personnel involved in our complex and interactive interfaces during this program: Alan Chambers and Mel Sadoff during planning, N. McFadden and H. Vykukal during task operations, and Ron Schmickley during data reduction.

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INTRODUCTION

A. OBJECTIVES

Reentry (from earth orbit to landing) of the forthcoming NASA Space Shuttle may require precise control of the vehicle attitude (manually, in an emergency) by pilots who have been subjected to: extensive periods of weightlessness, followed by sudden increases in normal load factor to levels of two or three times the acceleration of gravity for several minutes, then by a many-minute cruising period at one-g load factor to the point of landing. Several questions need to be answered before final development of this system can be completed, and these formed the main objectives of this experiment:

- Are the combinations of G_Z level and time, originally selected for tolerable habitability, compatible with the needs for possible emergency manual control?
- What is the effect of mild bedrest deconditioning on the control task abilities?
- What are the effects of anti-G_Z protection suits?

In this experiment both physiological condition and control performance were measured under simulated shuttle reentry situations, using experienced Navy pilots, deconditioned by enforced bed rest in the Ames Human Research Facility, followed by shuttle-type G_Z vs. time reentry profiles simulated on the Ames Flight and Guidance Centrifuge. This report discusses: the selection of the control task comparable in type and difficulty with manual reentry control of a shuttle-type vehicle, the measures used for diagnosis of the control performance, and finally the analysis and interpretation of the results. All other facets of the experiment, including experimental design, selection of G_Z profiles and test subjects, test operations, and physiological monitoring are reported separately in Ref. 1.

B. APPROACH AND SCOPE

Detailed shuttle control systems have not yet been determined, and we wished to provide generally useful diagnostic insight as to the source of performance changes. Consequently, a recently developed "Critical Tasks Battery" of tracking tests, measures, and parameters (e.g., Refs. 2 and 3) was adapted to this program, with emphasis on obtaining describing function parameters roughly every half-minute during the 20-30 minute G-profiles. For reasons to be discussed in Section II, roll tracking (simulating cross-range control) was the primary task with respect to performance measures, while pitch-attitude-control workload was provided by a surrogate "sub-critical" (unstable) task. The resulting two-axis control task was given a realistic scenario (to be discussed) and constituted an extremely demanding control task which was similar, in terms of attentional demand and failure penalty, to typical manual shuttle reentry control tasks.

Anticipating possible gradual blackout of the pilot during tests following bedrest deconditioning, the two-axis tasks and various performance measures, describing functions, and parameter fits were mechanized for on-line digital computation every 33.4 seconds during the 20-30 minute reentry profiles (Ref. 7). Although a continuous two-axis control was felt to provide more realistic task and richer diagnostic data, at high G-levels, some "Critical Instability" scores were measured pre-run and post-run to check most sensitively and efficiently the effects of bedrest per se on the basic control ability limits of each pilot. [A previous program, in which steady tracking and brief Critical Instability tasks were alternated during a 90-Day Sealed Chamber Experiment with four subjects (Ref. 4), had shown good correlation of certain continuous tracking parameters with Critical Instability scores.]

As events turned out, all eight pilots completed all runs both before and after extended bedrest, with performance that was remarkably consistent and only nominally affected by the various experimental factors. To reveal these subtle aspects, several segments of data were time averaged over certain profile phases and analyzed for statistical significance and correlation with the test variables.

SECTION II

TASKS AND MEASURES

A. TASK SELECTION, DESCRIPTION, AND RATIONALE

The winged, high L/D Space Shuttle landing vehicle is designed to reenter the atmosphere at a more easily tolerable level of deceleration of 2-3 g compared to the Apollo-type ballistic vehicle in which 4-8 g's are common. However, this lower g-level must be maintained for a long phase (several minutes), after which an extended (10 minutes or more) 1 g glide to home base must be completed. The hypothetical Shuttle-type G_Z vs. time profiles shown in Fig. 1 were simulated in this experiment.

During the high-g portion of these profiles, the vehicle is required to maintain a high angle of attack (often in the unstable range), while following roll control commands from onboard or ground-based guidance systems to effect cross-range course corrections. During the 1 g glide phase, pitch attitude must be closely maintained to hold the optimum-range angle of attack and to stabilize the glide path, and course corrections are again realized via bank angle control. In the event that an automatic guidance system malfunction required manual control backup, these are the key control tasks that the pilot would have to perform continuously for the whole 20-30 minute reentry and landing phase. The setup to be described next attempted to simulate this situation within severe constraints of simplicity, training time, and measurement ease.

Because finalized Shuttle vehicle dynamics were not available when this experiment was performed, and to simplify the mechanization and interpretation of the control tasks, the following control tasks and scenario were selected:

- The primary task was to "follow closely roll angle commands for guidance purposes," via a (compensatory) display of roll errors, and using sideways forces to a pressure sidestick. The controlled element was a rate control, having the transfer function, $Y_H = K_\varphi/s$, where K_φ = 10 deg/sec/Newton (CRT symbol roll per unit of force at the thumb position on the stick).

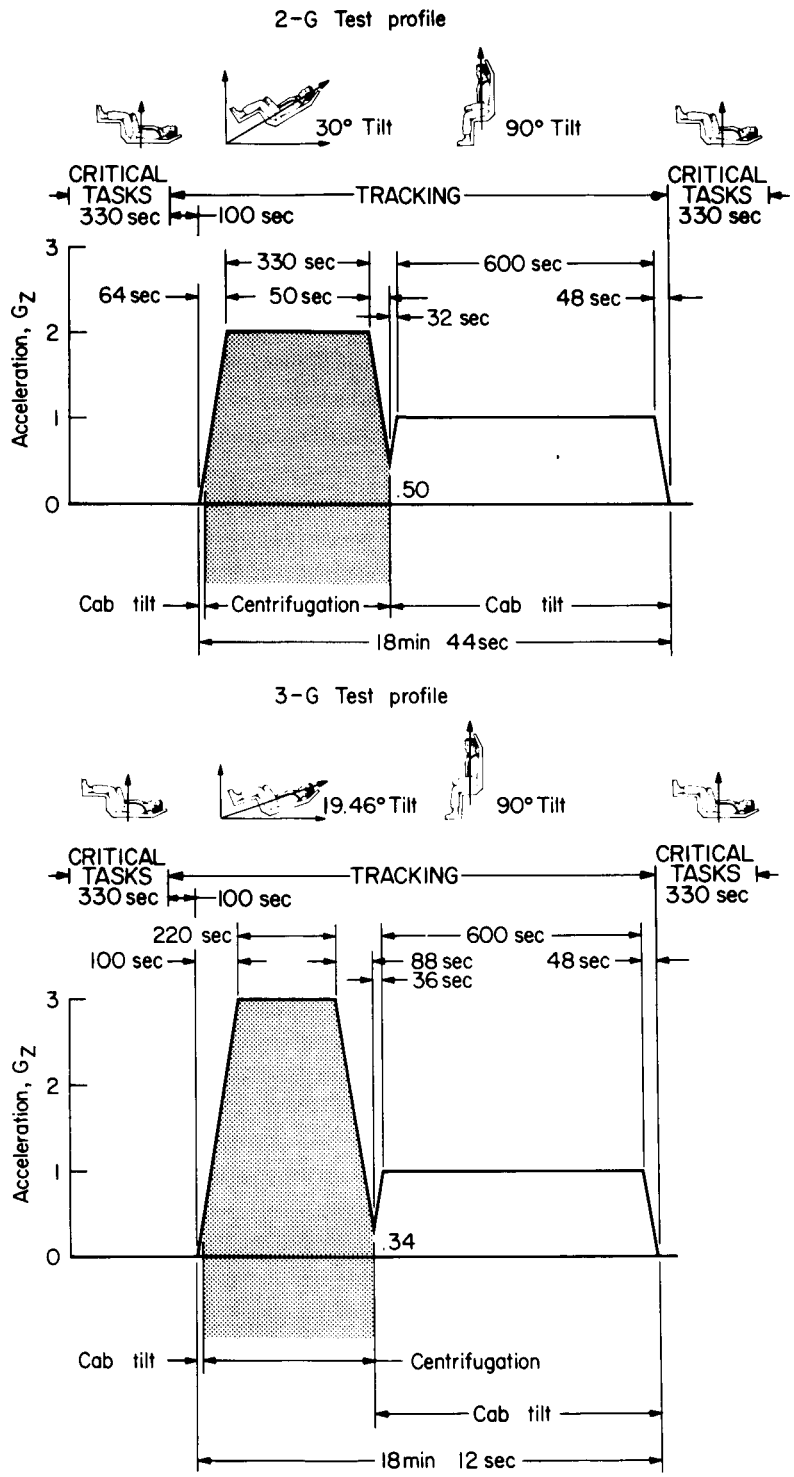


Figure 1. Simulated Reentry Profiles and Test Periods

The simulated roll guidance command to be followed was a random-appearing sum of non-simple-harmonic sinusoids having the frequencies and amplitudes shown in Table 1. The rms level of these roll commands was 10 degrees, and marks of this magnitude were placed on the display. All performance and describing function measurements were made in this axis.

- Pitch control was considered the secondary task. As evolved during preliminary trials to be a constant level of first-order instability (a pure divergence), $Y_V = K_\theta/(s - 2)$, (time constant = 0.5 seconds) where K_θ = 0.5 cm CRT/Newton on stick. No input is necessary because the operator's own visual-motor noise is sufficient to excite the unstable element. Attention to pitch cannot lapse for more than about 1/2 second or the error will diverge off scale, but a trained pilot can stabilize the pitch and roll loops simultaneously unless stressed excessively (i.e., this level of pitch instability is "subcritical" in the sense of Ref. 2). This subcritical task acted as a surrogate for the more complex control of unstable vehicle short-period dynamics in the high-angle-of-attack regime and for precise pitch control during the glide phase.

- The general situation was that of emergency manual-reentry control after either nil period in orbit (before bedrest), or after several days in orbit (after bedrest). Vehicle control required precise tracking of ground-based roll guidance commands (first priority), while maintaining the (unstable) pitch error within roughly 0.5 cm on the display.

TABLE 1

ROLL CONTROL TASK COMMAND

$$\varphi_c = \sum_{i=1}^{5} A_i \cos(\omega_i t + \theta_i) \quad (\theta_i \text{ randomly assigned})$$

COMPONENT	ω_i (rad/sec)	A_i (deg)
1	0.561	12.273
2	1.309	6.858
3	3.740	1.42
4	6.545	0.46
5	11.220	0.3339

All subjects accepted this scenario as realistic and challenging. This combination of tasks was very demanding of skill and attention, but did not require significant operator lead equalization (rate sensitivity). Preliminary attempts to use controlled elements requiring more operator lead and a Cross-Coupled Instability Task (which gradually adjusted the pitch instability to maintain a specified rms level of roll error, Ref. 5) were not successful because of the very short training period available.

At the beginning and end of each centrifuge run, while the subject was at 0 G_Z (semisupine), a set of Critical Instability trails was run, three each for the roll axis, pitch axis, and both axes together. In the Critical Task, the controlled element is a first-order divergence whose degree of instability is gradually increased by a special "autopacing" algorithm, until control is lost (see Ref. 2):

$$Y_V \text{ (pitch) and/or } Y_H \text{ (roll)} = \frac{K\lambda'}{s - \lambda'} \quad ; \quad \lambda \rightarrow \lambda_c = \text{Critical Instability}$$

Prior research (Ref. 4) has shown that the Critical Instability Score, λ_c, correlates well with several of the more sophisticated steady-tracking parameters obtained from describing function measurements and model fits, notably with dynamic effective delay, τ_e, crossover frequency, ω_c, unstable frequency, ω_u. Thus, we could check any intrinsic loss of basic steady tracking ability due to bedrest or fatigue during the 30 minute reentry stress. It was originally felt that use of repeated Critical Tasks during the reentry would not be as realistic as the continuous tasks chosen, nor would the resulting single λ_c score be as diagnostically useful as the short-segment describing function parameters to be described next. To expedite formal trials, the autopacing rate was increased 50 percent above standard (to λ_{hi} = 0.3 rad/sec^2), based on an optimization experiment summarized in Appendix B.

B. MEASURES

During the tracking portions of the run, the roll error signal is Fourier analyzed with respect to the input frequencies by an on-line Describing Function Analyzer. The five input sinusoids have a common multiple period

of 33.6 seconds over which accurate Fourier integrals are computed. These real and imaginary parts of each error phasor are stored for post-run calculations of the relevant open-loop describing functions. The techniques are described in Refs. 2 and 6, the basic Mod I Critical Task Battery digital mechanization is given in Ref. 3, and its adaptation to this experiment is summarized in Ref. 7.

From these on-line Fourier coefficients, plus knowledge of the linear transfer functions of the controlled element, the input coherent signals at the error, control, and output points can be reconstructed and their quasi-linear describing functions computed. The open-loop describing function, $Y_{OL} = Y_p \times Y_c$, is then fitted in the unity gain region by a modified form of the "Crossover Model," from which the pilot-vehicle loop-closure parameters may be interpolated:

$$Y_{OL}(j\omega) = Y_p(j\omega) \times Y_c(j\omega) \doteq \frac{\omega_c}{(j\omega)^N} e^{-j(\tau_e \omega + \alpha/\omega)} \qquad (1)$$

where

Y_p = Pilot's describing function

Y_c = Controlled element describing function

ω_c = Unity gain crossover frequency (a measure of closed-loop system effective bandwidth, as adopted by pilot)

$N \propto$ Slope in crossover region (approximately 1.0)

τ_e = Effective time delay of the visual-motor system

α = Low-frequency phase droop parameter

Other important dynamic loop-closure stability and bandwidth parameters are also computed, i.e.:

$\omega_u = \omega|_{\angle = -180^\circ}$ = Phase crossover (unstable) frequency (a measure of maximum possible bandwidth for given pilot)

$\varphi_M = 180^\circ - \angle Y_{OL}|_{\omega_c}$ = Phase Margin — a measure of the stability margin of the loop closure

The digital program interpolates these parameters from the Y_p and Y_c describing functions at the two frequencies which straddle gain crossover region.

The spectra of various signals at the input frequencies can also be computed (Ref. 6), and the relative coherence and other normalized performance measures are calculated:

$\rho_e^2 = \frac{\sigma_{e_i}^2}{\sigma_e^2}$ = Portion of error signal linearly correlated with the input, the remainder being "error remnant"

$\rho_c^2 = \frac{\sigma_{c_i}^2}{\sigma_c^2}$ = Portion of control signal linearly correlated with the input, the remainder being "control remnant"

Immediately following a run, all of these are printed out for every segment followed by a summary table of the thirteen most important parameters. For purposes of analyzing the tracking segments, the measures shown in Table 2 are of most importance.

In addition to the comprehensive measurements taken during tracking, critical instability scores (λ_c) were measured during the pre- and post-run periods:

λ_{c_φ} = Critical instability for roll axis alone (rad/sec)

λ_{c_θ} = Critical instability for pitch axis alone (rad/sec)

$\lambda_{D_{\theta\varphi}}$ = Dual-axis critical instability, both axes stabilized and same level of λ in each (rad/sec)

Three consecutive trials of each were administered and the average value taken as the score for that period.

TABLE 2

KEY MEASUREMENTS (AVERAGE DURING EACH SEGMENT)

	SYMBOL	FORTRAN NAME	UNITS
TEST CONDITIONS			
Time from start of run		TIME	sec
Acceleration level	G_z	GZ	g's
Segment number		SEGMENT	–
Pitch axis instability level (average during segment)	λ_x	LAMEAN	rad/sec
PERFORMANCE MEASURES			
RMS error in primary roll task	σ_{φ_e}	RMSEH	deg
Error coherency (roll)	$\rho^2_{e_\varphi}$	RHOE2H	–
RMS control activity (roll)	σ_c	RMSCH	newtons
Control coherency (roll)	ρ_c^2	RHOC2H	–
DESCRIBING FUNCTIONS			
Open loop describing functions	$Y_{OL}(j\omega) = Y_p \cdot Y_c$	M/E	dB, deg
Pilot's describing function	$Y_p(j\omega)$	YP	dB, deg
DESCRIBING FUNCTION PARAMETERS			
Crossover frequency in roll task	ω_{c_φ}	WCH	rad/sec
Unstable frequency in roll task (phase crossover)	ω_{u_φ}	WUH	rad/sec
Stability (phase margin)	φ_M	PMARH	deg
Effective operator delay	τ_e	TAUH	sec

C. SETUP AND APPARATUS

The apparatus used to mechanize the foregoing tasks and measures (which have the generic title: "Critical Tasks Battery" or "CTB") is portrayed in Fig. 2. The setup shown allowed both training runs and centrifuge runs to be made alternatively.

1. Tracking and Operating Stations

Two tracking stations were used during the G_z Experiments; the "horse trailer," fixed-base training cab (named for its similar appearance to a horse moving trailer), and the centrifuge cab for the acceleration trials. The controls and displays in each station were identical.

The tracking tasks were semi-automatically administered to the subjects by a digital program to be described later. The experimenter controlled the computer via a teletype terminal adjacent to the "horse trailer" cab and strip-chart recorder.

2. Displays and Controls

The display simulated a moving-symbol type of flight director in which the pilot's task was to move his controls in the movement direction indicated by the symbol displacement until the error was nulled out. The CRT symbol format is described in Fig. 3. The FD symbol was not roll-resolved, so that the center of the cross remained on the CRT vertical centerline. The horizontal arm of the cross is 10 cm long; the (nominally) vertical arm is initially 1 cm long. As the level of instability, λ, of the tracking task increases, the length of the vertical arm increases proportionally so that $\ell(t)$ cm = 1.0 $\lambda(t)$ rad/sec. This action gives the subject qualitative visual indication of his instability level during the progress of the test. The symbol's displacement is viewed against the reference masks taped on the face of the CRT display represented in Fig. 3.

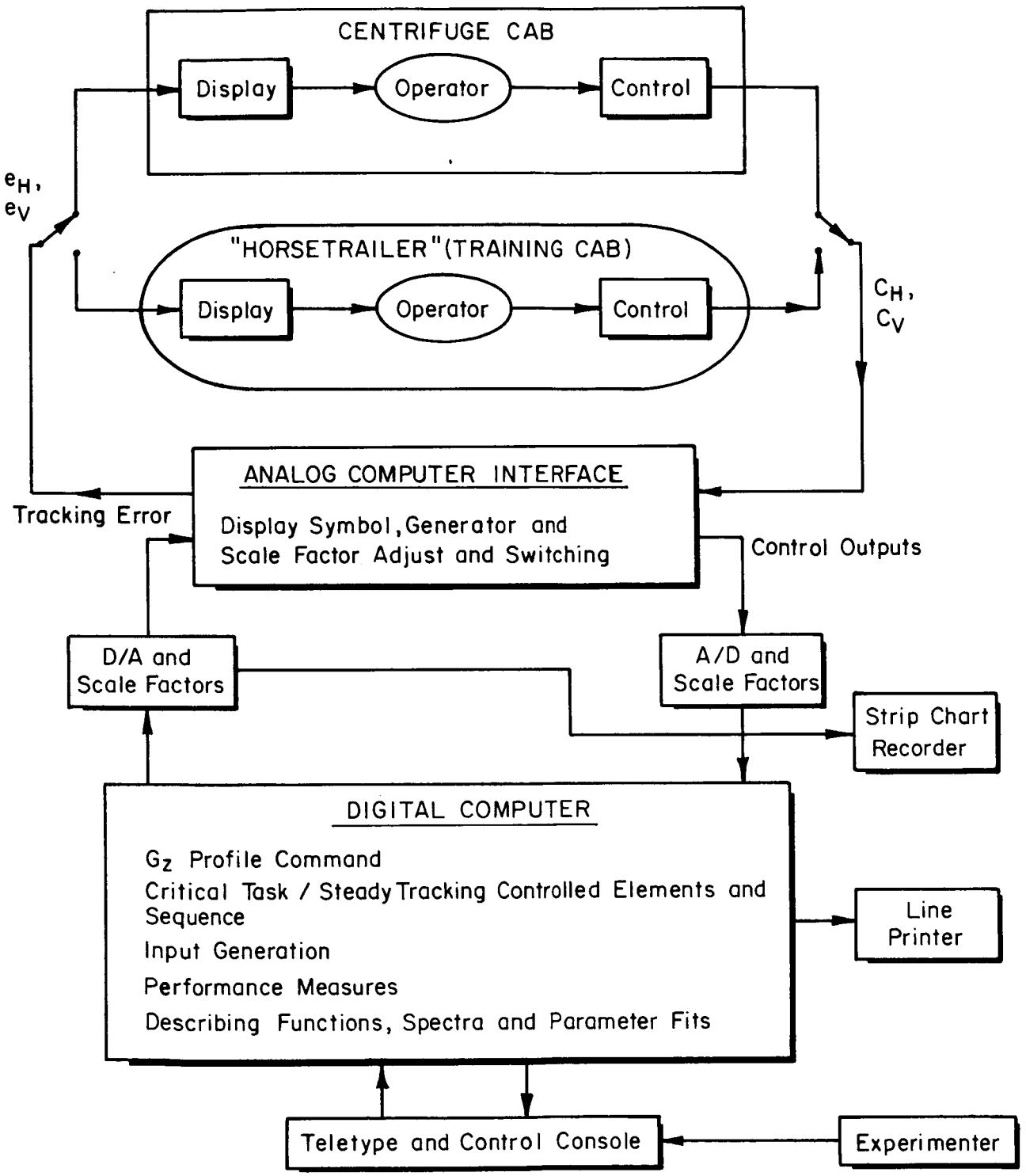


Figure 2. Experimental Setup

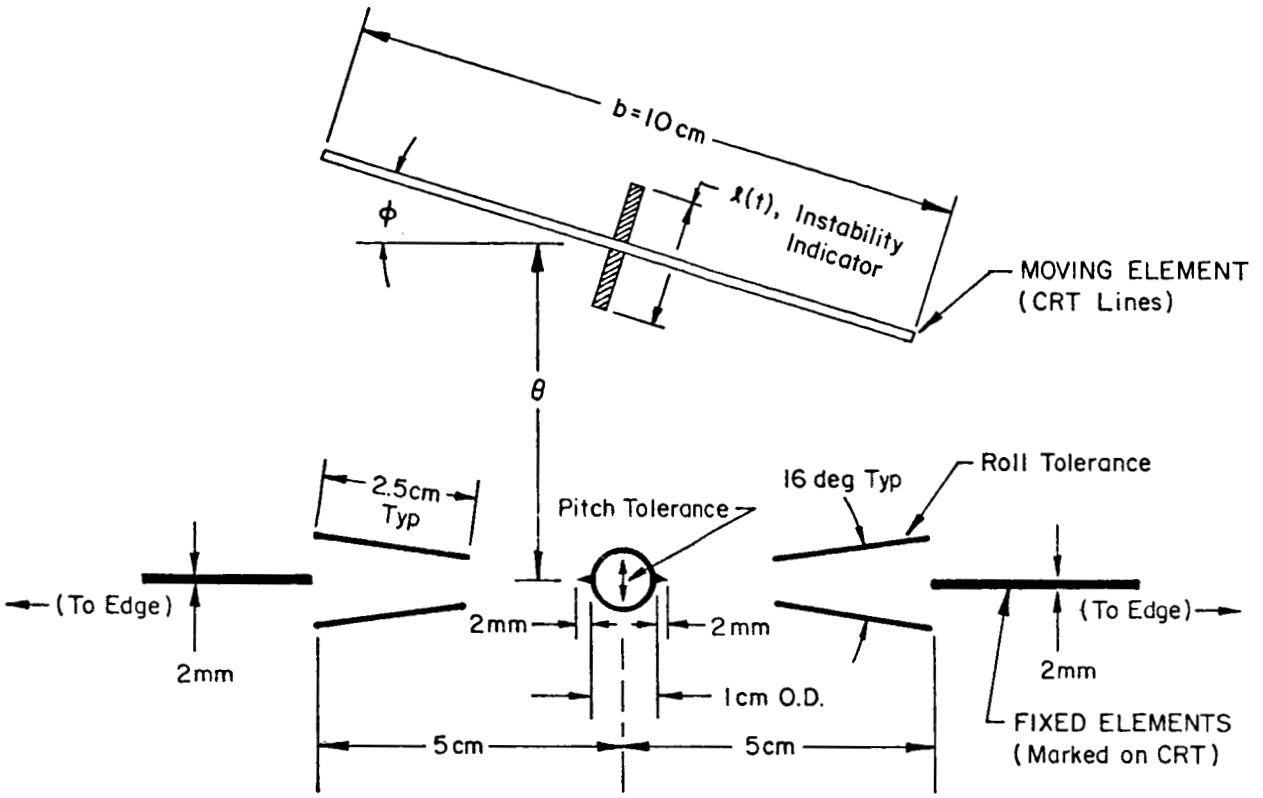
The right sidearm control stick was a modified version of the Measurement Systems Inc. Model 435 2-axis isometric control. The handle was extended and a handgrip added for comfortable gripping. Push-pull movement controlled pitch and side-to-side movement controlled roll, with the gains shown in Fig. 3. All forces are defined at a mark at the thumb position of the grip which corresponded roughly with the knob center of the MSI handle. U-shaped supports of firm foam plastic braced the wrist and elbow of the subjects, such that forearm motions were minimal under G_z, while wrist motions were unimpeded. A photograph of the subject in place is given in Fig. 4.

3. Hybrid Computer

The controlled element dynamics/critical task autopacing and end-of-run data processing of the CTB were mechanized on a digital computer program entitled "Critical Task Tester, RLS/RAP, 12 May 1972, NASA ARC Version Mod. II," which is a modification of the basic Critical Tasks Battery (Mod. I) program described in Ref. 3. The Mod. II program was combined with a second program which commanded the G_z profile to be followed by the centrifuge. The combined program was executed on the Ames Research Center's EAI 8400 hybrid computer. The analog computer portion of the hybrid, an EAI 231R, was used to generate the tracking error symbol and to establish the proper scale factors. D/A and A/D converters interfacing the digital and analog computers also allowed scale factor adjustment. A strip chart recorder was driven directly from the D/A converter. Post-run data and calculations were output on a line printer.

As is described in more detail in Ref. 3, the Mod. I CTB program implements the following:

- Manual or automatic sequencing of tasks and time limit provisions
- Mechanization of the autopaced Critical Instability Tasks in either or both (dual) axes



Wing: Rolls with φ; center translates with θ:

$$H_{CRT} = \tilde{B} \cos \varphi(t)$$

$$V_{CRT} = \tilde{B} \sin \varphi(t) + \theta(t)$$

where B = 1000 Hz sine or sawtooth sweep with peak to peak amplitude of b = 10 cm

Tail: Centered on wing; rolls with wing; length indicates $\lambda(t)$:

$$H_{CRT} = \tilde{L} \sin \varphi(t)$$

$$V_{CRT} = \tilde{L} \cos \varphi(t) + \theta(t)$$

where $\tilde{L}$ = 1000 Hz sine or sawtooth sweep with peak-to-peak amplitude of $\ell(t)$: $\ell(t)[cm] = 1.0\ \lambda(t)[r/s]$

Display Gains:

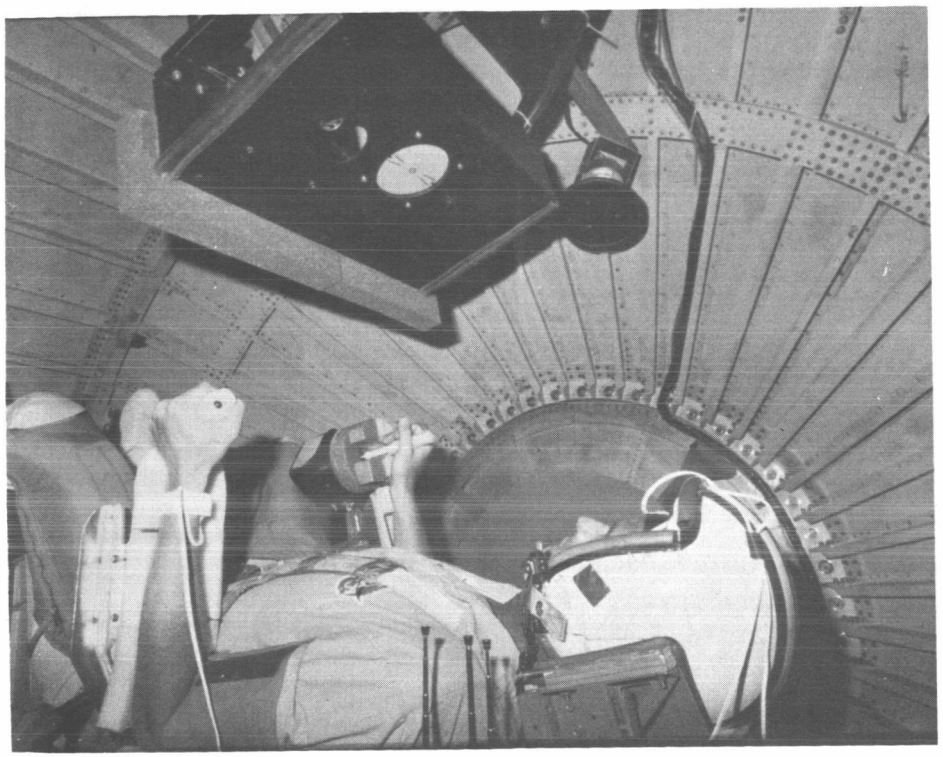
Pitch : $\frac{\theta}{\delta_{st}}$ = .5 cm on CRT/Newton at knob (pull moves symbol up)

Roll : $\frac{\varphi}{\delta_{st}}$ = 10 deg on CRT/Newton at knob (right stick rolls symbol right)

Figure 3. Simulated Pitch/Roll Flight Director Display

a. "Horse Trailer" (Practice Station)

Figure 4. Photo of Subject in Place in Practice and Centrifuge Tracking Stations



b. Centrifuge Cab (Supine Starting Position)

Figure 4 (Concluded)

- Mechanization of the Steady Tracking Task in either or both axes (this includes independent inputs to each axis and computation of performance measures and describing functions in each axis)

- Mechanization of a modified form of the "Multitask Workload Task". In this task the primary axis is a Steady Tracking Task (with inputs, describing functions, performance measures, etc.) while the secondary axis is a Subcritical Instability Task with the level of instability adjustable adaptively to primary axis performance (cross-coupled workload, Ref. 5) or, as used here, fixed at some level of attentional demand

- Data averaging of successive trials of Critical Instability Task or for the Serial Segment form of remnant estimation (Ref. 8)

- Commands appropriate alerting motions of the display symbol to initiate each trial of the Critical Task

- Provides for during-run aborts of the tracking tasks and re-start of computations (manually or automatically) without shutting down the centrifuge

- Printout of reduced data for each segment and/or an abbreviated summary table for all segments at the end of each run

As events transpired, throughout the formal portion of this G_z Experiment the automatic sequence mode was used, with the Multitask Workload configuration in action. Performance measures in the secondary (pitch) axis were consequently not available.

For readers interested in using or adapting the Mod. I and Mod. II Critical-Tasks-Battery Programs to their own experiments, please consult Refs. 3 and 7, respectively.

D. TEST SUBJECTS AND TRAINING

The test subjects were all Navy reserve pilots who had varying degrees of flight time on fighters and attack aircraft such as the A-7, F-4, etc. Table 3 provides some of their pertinent background data.

All subjects were randomly pre-assigned by Ames personnel to one of two teams, one group schedule for 2-G_z maximums and the other group for

TABLE 3

PHYSICAL CHARACTERISTICS AND FLIGHT EXPERIENCE OF THE TEST SUBJECTS

SUBJECT	AGE yr	HEIGHT cm (in.)	WEIGHT kg (lb)	FLIGHT TIME hrs	TYPE OF AIRCRAFT	TYPE OF CURRENT FAA RATING
A	29	182 (71-1/2)	71.8 (158)	1500	A-4, A-7	Instrument
B	30	173 (68-1/4)	79.3 (174)	1400	A-7, A-4, F-8	Commerical, instrument, flight engineer (Turbojet)
C	33	173 (68)	73.0 (161)	2900	A-4, A-7	MEL, commercial, instrument
D	25	190 (75)	83.5 (184)	1050	A-4, A-7	Commercial, instrument
E	29	180 (71)	96.8 (213)	1700	A-7	Flight instructor, MEL, commercial, instrument
F	28	177 (69-1/2)	76.0 (165)	1500	F-4, A-4, A-7	Commercial, instrument
G	29	173 (68)	81.6 (180)	1450	A-4, A-7	Flight instructor, MEL, instrument
H	25	171 (67-1/2)	75.9 (167)	850	A-7	Commercial, instrument

3-G_Z maximums. No attempt was made to balance the ranges of physiological or performance parameters between groups.

Subjects were trained in the fixed-base "horse trailer" stations, sitting erect at 1 G_Z. Each subject had several trials at tracking individual and combined axes and repeated the combined task until asymptotic performance was indicated. One pre-experiment exposure to the centrifuge G-profile was given to each subject to familiarize him with the mission and sequences.

A separate Mk II Critical Task Tester (described in Ref. 2) was available for practice on critical tasks and control of unstable elements. This is a single axis tester with a CRT-line display of error and an isometric finger controller which yields slightly higher critical instability scores than the display and control used in the G_Z experiment. Subjects were allowed unlimited practice on this device, logging each other's scores in buddy-fashion. This scheme provided a good incentive, rapid learning, and efficient transfer of training to the actual displays and controls in the horse trailer. During this period four subjects performed the "mini experiment" described in Appendix A in order to optimize the autopacing rate to achieve the quickest run while retaining a consistent score.

E. EXPERIMENT DESIGN

The basic experimental design (see Ref. 1 for further details) includes the following variables:

VARIABLE	LEVELS	
Deconditioning (by enforced bedrest for 10 days)	Pre-Rest	Post-Rest
G-Suit Protection	Without	With
Profile Maximum Normal Load Factor	2-G_Z	3-G_Z
Subjects (4 per G_Z group)	A, C, E, G	B, D, F, H

Each subject was exposed to his G-profile with four combinations of rest and protection. The order of exposure with or without G-suit protection was balanced for order effects.

Three periods of the mission profile were chosen for detailed performance analysis, each containing four segments for performance and parameter averaging:

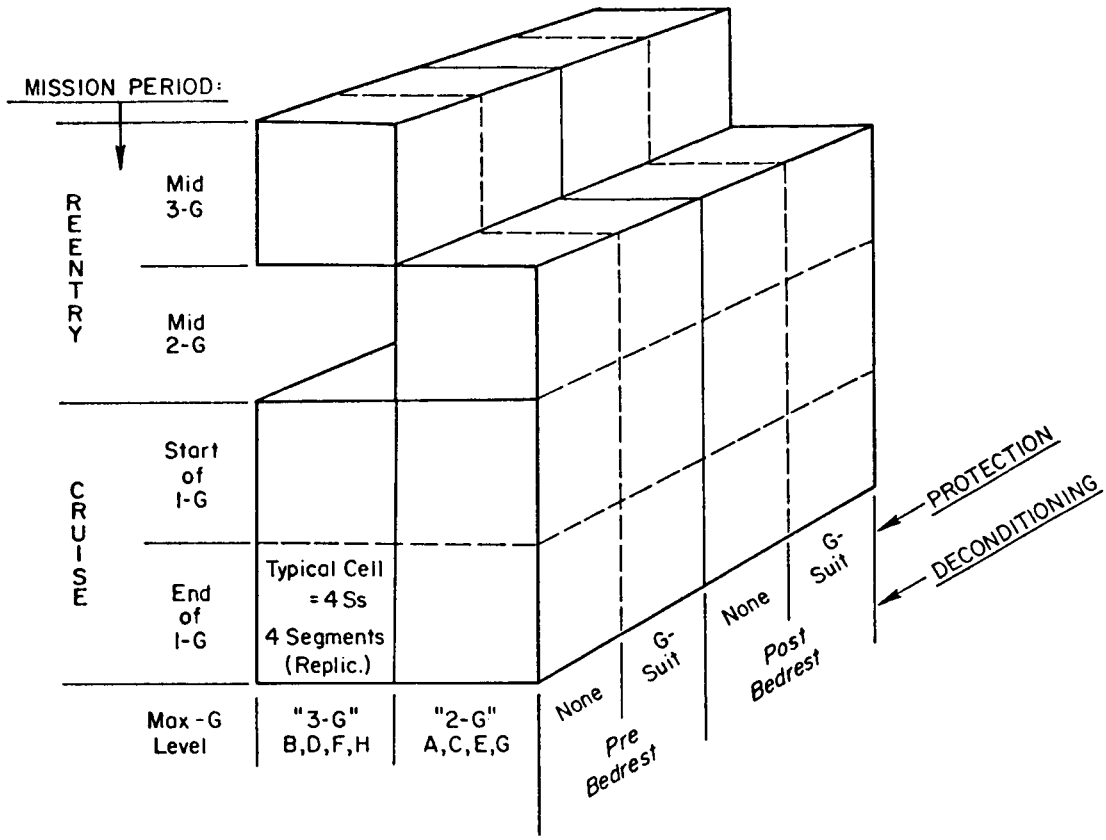
Period

1 "Re-entry" at maximum G ($2\text{-}G_Z$ or $3\text{-}G_Z$)

2 Start cruise $\doteq$ first 100 secs of 1 G

3 End cruise $\doteq$ last 100 secs of 1 G

The resulting design of the analysis is summarized in Fig. 5, and Fig. 6 shows the test schedule followed in implementing this design.



Tasks — 2-Axis Tracking:

Roll : Follow random guidance commands: $Y_c = K/s$; $\sigma_{\varphi_i} = 10$ deg (5 freq)

Pitch: Stabilize unstable vehicle: $Y_c = K/(-Ts + 1)$; $T = .5$ sec

Measurements:

Performance : Tracking error, σ_{φ_e}; control activity, σ_c
Error coherence, ρ^2_{φ}; control coherence, $\rho_c{}^2$

Pilot Describing Fns: Max bandwidth, ω_u; actual bandwidth, ω_c;
Effective delay, τ_e; stability margin, φ_M
Error and control spectra at ω_i

Analyses:

2 sets of 4-way ANOV's for : σ_{φ_e}, ρ^2_{φ}, ω_u, ω_c, τ_e, φ_M

Selected Descr. Fn. curve-fits with least-square 6-parameter model

Figure 5. Design of Experimental Analysis

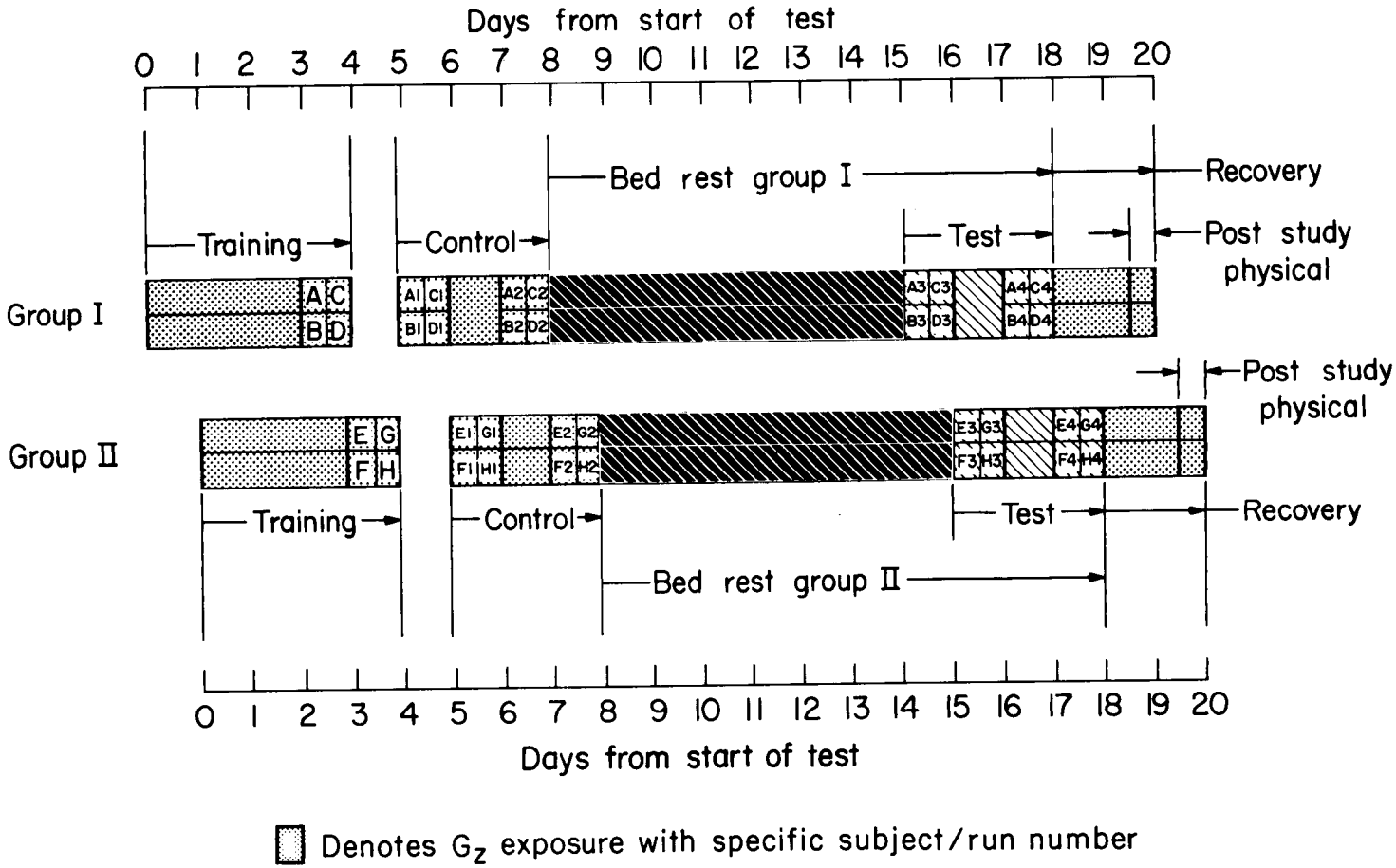


Figure 6. Test Schedule

SECTION III

RESULTS

A. TYPICAL BASIC DATA

Before proceeding with the analysis of reduced data, it is desirable to obtain an impression of the basic raw and reduced data on which any averages are based. All such data for this experiment were carefully scrutinized, sifted, and "laundered" for gross omissions or anomalous "wild" points before analysis.

1. Time Traces

The recorded tracking signals for a typical 2-G_Z run are shown in Fig. 7. Main points to note are as follows:

- The Critical Task instability level, λ_θ, λ_φ, or λ_D, shows rapid approach to the terminal level, which existed for several seconds. Successive scores are fairly consistent.
- During tracking, the roll error is very consistent and steady, even under the maximum G_Z conditions.
- The roll control activity increases noticeably during maximum G_Z.
- The pitch error and pitch control activity increase noticeably with increased λ_X and then again with the onset of 2 g, but then remain similar at 1 g.

2. Parameters Vs. Time

As noted in Section II, various describing function and other performance measures were reduced for every 33.6-second segment of the run, and printed out at the end of the run in a lengthy array of tables. Figures 8 and 9 give typical end-of-run printouts for Segment 10 of the run just shown on Fig. 7. The reader interested in details of the open- or closed-loop describing functions, various spectra, and other normalized performance and fitting

(RUN G1)

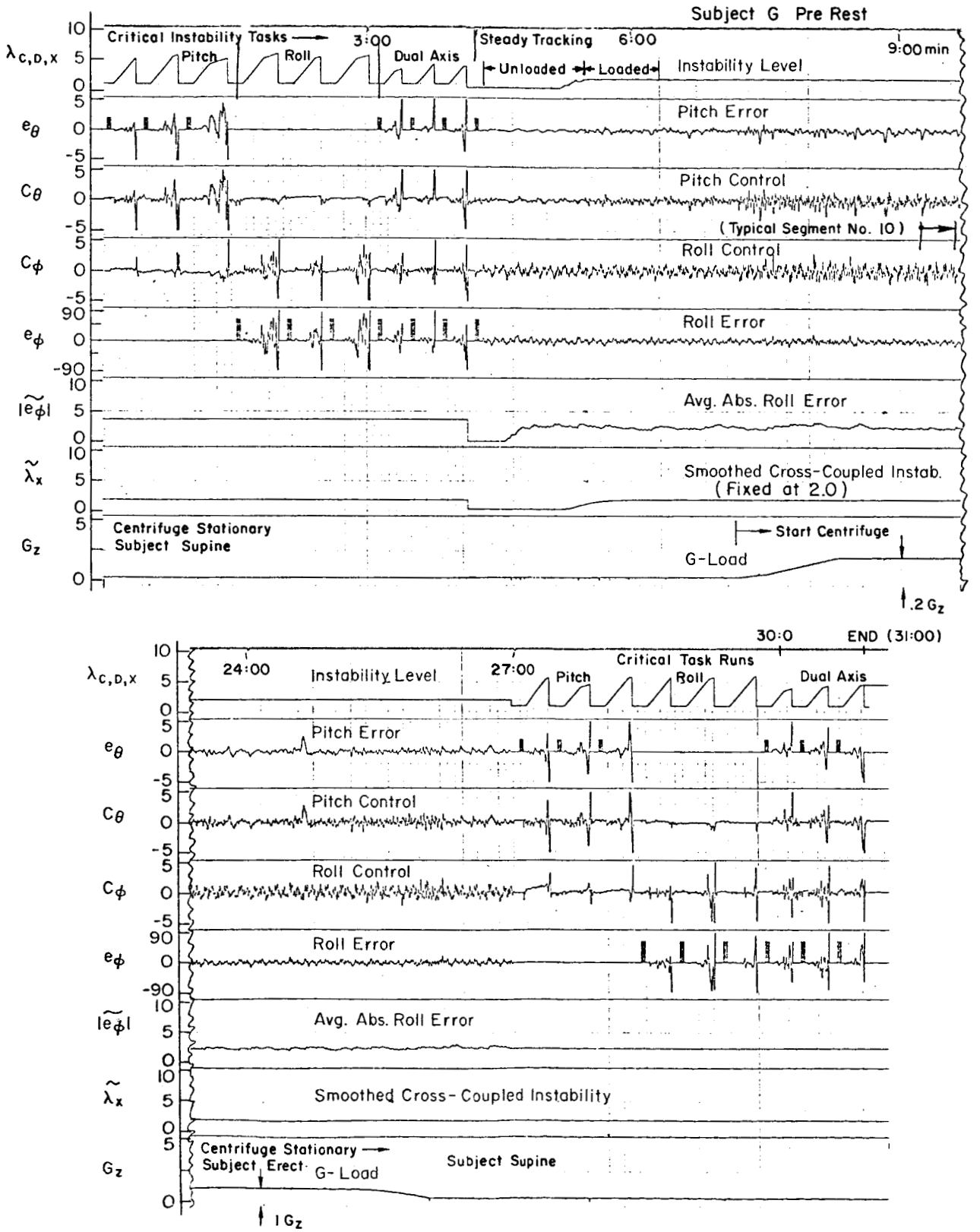


Figure 7. Typical Tracking Data Time Traces (Run G1)

```
********************************** HORIZONTAL AXIS **********************************

SUBJECT: G          DATE: 230572          RUN: G1          SEGMENT 10

CROSS-COUPLED TASK    YCH= 20.00/S    NYCV=4    SEG START= 576.74 SEC

LAMBDA X:       RANGE= 2.00 TO  2.00    AVERAGE= 2.00

A=SIGMAH/ESTAR=0.00    PERFORMANCE FUNCTION=A*LAMBDAX=  7.68

FREQ., RAD/SEC        0.561      1.309      3.740      6.545     11.220

E/I GAIN, DB         -15.52      -9.57       1.80       8.34       3.75
   PHASE, DEG         90.24      93.05      78.11      30.61     -34.17

M/E GAIN, DB          15.65      10.16       1.22      -3.12      -4.60
   PHASE, DEG        -99.74    -111.11    -136.31    -163.80     141.76

YC  GAIN, DB          31.04      23.68      14.57       9.71       5.04
   PHASE, DEG        -90.32     -90.75     -92.14     -93.75     -96.43

YP  GAIN, DB         -15.40     -13.52     -13.34     -12.83      -9.63
   PHASE, DEG         -9.42     -20.36     -44.17     -70.05    -121.81

M/I GAIN, DB           0.13       0.59       3.02       5.23      -0.84
   PHASE, DEG         -9.50     -18.06     -58.20    -133.19     107.60

COR ERR SPECTRUM 0.1129E 02 0.1388E 02 0.8161E 01 0.3868E 01 0.7071E 00
COR STK SPECTRUM 0.3262E 00 0.6171E 00 0.3781E 00 0.2017E 00 0.7692E-01

PERF. MEASURE       RMS          TOT VAR      COR VAR      REM VAR      RHO SQ
   ERROR:     0.2980E 01   0.8885E 01   0.7090E 01   0.1795E 01   0.7979E 00
   STICK:     0.6514E 00   0.4243E 00   0.2992E 00   0.1250E 00   0.7052E 00

MSE/MSI = 0.039     MEAN ERROR=-0.3049E 00

INTERPOLATED M/E PARAMETERS
   WC =  4.38 RAD/SEC      WU =  7.94 RAD/SEC      SLOPE = -17.86 DB/DEC
   GAIN MARGIN =  3.65 DB        PHASE MARGIN = 37.72 DEG
   TAU =0.1874 SEC               ALPHA = 0.401 RAD/SEC
```

Figure 8. Typical On-line Printout for a Given Segment (Segment 10 of Run G1)

SUMMARY DATA

SUBJECT: G DATE: 230572 RUN: G1 SEGMENT

CRISS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
O		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC 240.74
1	0.50	0.00	3.83	0.85	0.53	0.88	2.67	9.24	56.56	0.16	0.40	0.23	274.34
2	1.40	0.00	3.53	0.87	0.56	0.89	3.09	9.40	53.31	0.16	0.45	0.24	307.94
3	2.00	0.00	3.27	0.79	0.56	0.86	3.18	8.59	47.53	0.19	0.39	0.25	341.54
4	2.00	0.00	2.96	0.84	0.55	0.89	3.42	8.31	50.65	0.18	0.27	0.23	375.14
5	2.00	0.00	3.24	0.77	0.58	0.80	3.51	9.14	53.47	0.14	0.53	0.23	408.74
6	2.00	0.00	3.61	0.67	0.69	0.68	3.02	8.48	42.17	0.20	0.73	0.40	442.34
7	2.00	0.00	3.52	0.80	0.75	0.62	3.76	8.68	34.73	0.14	1.71	1.23	475.94
8	2.00	0.00	3.26	0.65	0.66	0.67	3.40	8.44	46.09	0.20	0.25	1.87	509.54
9	2.00	0.00	2.91	0.79	0.68	0.67	3.94	8.05	41.02	0.20	0.22	1.89	543.14
10	2.00	0.00	2.98	0.80	0.65	0.71	4.38	7.94	37.72	0.19	0.40	1.87	576.74
11	2.00	0.00	3.28	0.81	0.69	0.74	3.73	8.54	42.32	0.19	0.50	1.92	610.34
12	2.00	0.00	3.00	0.79	0.67	0.65	4.05	8.40	47.30	0.18	0.13	1.92	643.94
13	2.00	0.00	2.49	0.83	0.63	0.74	4.18	8.11	39.94	0.18	0.56	1.90	677.54
14	2.00	0.00	2.99	0.83	0.64	0.72	4.08	8.23	42.57	0.18	0.42	1.91	711.14
15	2.00	0.00	3.23	0.72	0.72	0.67	4.13	7.99	35.80	0.17	1.04	1.91	744.74
16	2.00	0.00	2.97	0.72	0.69	0.64	3.45	7.89	49.49	0.18	0.32	1.90	778.34
17	2.00	0.00	2.96	0.74	0.71	0.60	3.70	8.38	42.78	0.18	0.59	1.87	811.94
18	2.00	0.00	2.90	0.62	0.66	0.65	3.59	9.22	39.88	0.21	0.46	1.40	845.54
19	2.00	0.00	3.30	0.77	0.63	0.81	3.54	8.66	44.33	0.17	0.73	0.51	879.14
20	2.00	0.00	3.11	0.89	0.59	0.88	3.41	8.97	42.63	0.19	0.59	1.04	912.74
21	2.00	0.00	3.08	0.82	0.56	0.89	3.44	8.47	44.50	0.20	0.32	1.02	946.34
22	2.00	0.00	3.16	0.88	0.57	0.91	3.05	8.28	42.92	0.20	0.62	1.02	979.94
23	2.00	0.00	3.17	0.84	0.56	0.89	3.06	7.78	48.42	0.18	0.49	1.02	1013.54
24	2.00	0.00	3.89	0.79	0.53	0.86	2.80	8.54	53.49	0.24	-0.06	1.03	1047.14
25	2.00	0.00	3.19	0.86	0.58	0.87	3.03	8.17	49.04	0.19	0.54	1.03	1080.74
26	2.00	0.00	3.22	0.87	0.57	0.89	3.39	8.52	44.27	0.20	0.38	1.02	1114.34
27	2.00	0.00	3.35	0.77	0.57	0.85	3.06	7.85	47.85	0.18	0.54	1.03	1147.94
28	2.00	0.00	3.52	0.88	0.53	0.87	3.00	8.50	58.36	0.15	0.35	1.02	1181.54
29	2.00	0.00	3.37	0.73	0.58	0.75	2.89	8.51	54.11	0.17	0.38	1.02	1215.14
30	2.00	0.00	3.53	0.82	0.55	0.86	2.67	7.71	52.11	0.19	0.44	1.03	1248.74
31	2.00	0.00	3.63	0.89	0.57	0.83	3.07	8.55	50.06	0.18	0.40	1.04	1282.34
32	2.00	0.00	3.22	0.90	0.57	0.88	3.74	8.35	49.97	0.16	0.41	1.02	1315.94
33	2.00	0.00	3.05	0.77	0.56	0.88	3.45	7.92	47.18	0.20	0.20	1.02	1349.54
34	2.00	0.00	3.19	0.75	0.63	0.83	3.95	8.54	40.44	0.15	1.07	1.02	1383.14
35	2.00	0.00	3.17	0.84	0.57	0.87	3.34	7.95	46.46	0.19	0.46	1.02	1416.74
36	2.00	0.00	3.14	0.83	0.61	0.83	3.53	7.70	50.29	0.15	0.62	1.02	1450.34
37	2.00	0.00	2.98	0.79	0.61	0.82	3.43	8.43	40.70	0.21	0.43	1.04	1483.94
38	2.00	0.00	3.17	0.80	0.65	0.76	3.35	7.47	47.18	0.16	0.71	1.00	1517.54
39	2.00	0.00	3.55	0.68	0.71	0.68	3.66	7.53	35.67	0.23	0.38	0.44	1551.14
40	2.00	0.00	3.28	0.85	0.58	0.89	3.35	8.15	43.44	0.21	0.42	0.24	1584.74

Analyzed Periods:

- at Max G_z: segments 10, 11, 12, 13
- Start of $1\,G_z$: segments 23, 24, 25, 26
- End of $1\,G_z$: segments 35, 36, 37, 38

Figure 9. Typical Summary Data Printout for All Segments (Run G1)

parameters can use the data in Figs. 8 and 9 as typical of most runs in the experiment (i.e., variations among runs were in degree, not in kind). Figure 10 shows a time plot of the important parameters for each segment for the afore-mentioned Run G1. The trends shown are typical of other data (e.g., see Appendix B) from which the following conclusions are drawn:

- Data at max g and near the start or end of the 1 g periods are representative of the entire profile.
- Four successive segments at each profile phase were picked for subsequent statistical analysis and are noted on Figs. 9 and 10.
- The key parameters are σ_{φ_e}, ρ_e^2, ω_c, and τ_e. Others shown either do not add anything new (e.g., ρ_c^2) or are too erratic (e.g., α).

3. Describing Functions

Figure 11 shows typical pilot describing function plots for the afore-mentioned subject, both before and after bedrest, and at 2 G_z and near the start of 1 G_z. Also superimposed on the points are the local curve fit from the Extended Crossover model described in Section II-B. (The fit is shown only over its limited region of validity, because it is not intended to match the very low-frequency or high-frequency magnitude effects of the neuromuscular system.) Generally speaking, the two parameters, ω_c and τ_e, described most of the important features of each subject's quasilinear behavior adequately. This means that we can conveniently compare effects on these few parameters, rather than on complete describing functions, in the remainder of the report.*

B. SELECTION OF DATA FOR ANALYSIS

With the exception of one pilot subject (Subject F), all pilots showed qualitatively similar time traces, parameter levels, and describing functions. The differences were in degree rather than in kind. All seven completed their runs without loss of control, even after bedrest, while the exceptional subject

*Complete tabulations of all describing functions and spectra at input frequencies are on file at NASA Ames Research Center, Environmental Control Branch. Tabulations of the summary tables are given in Appendix B.

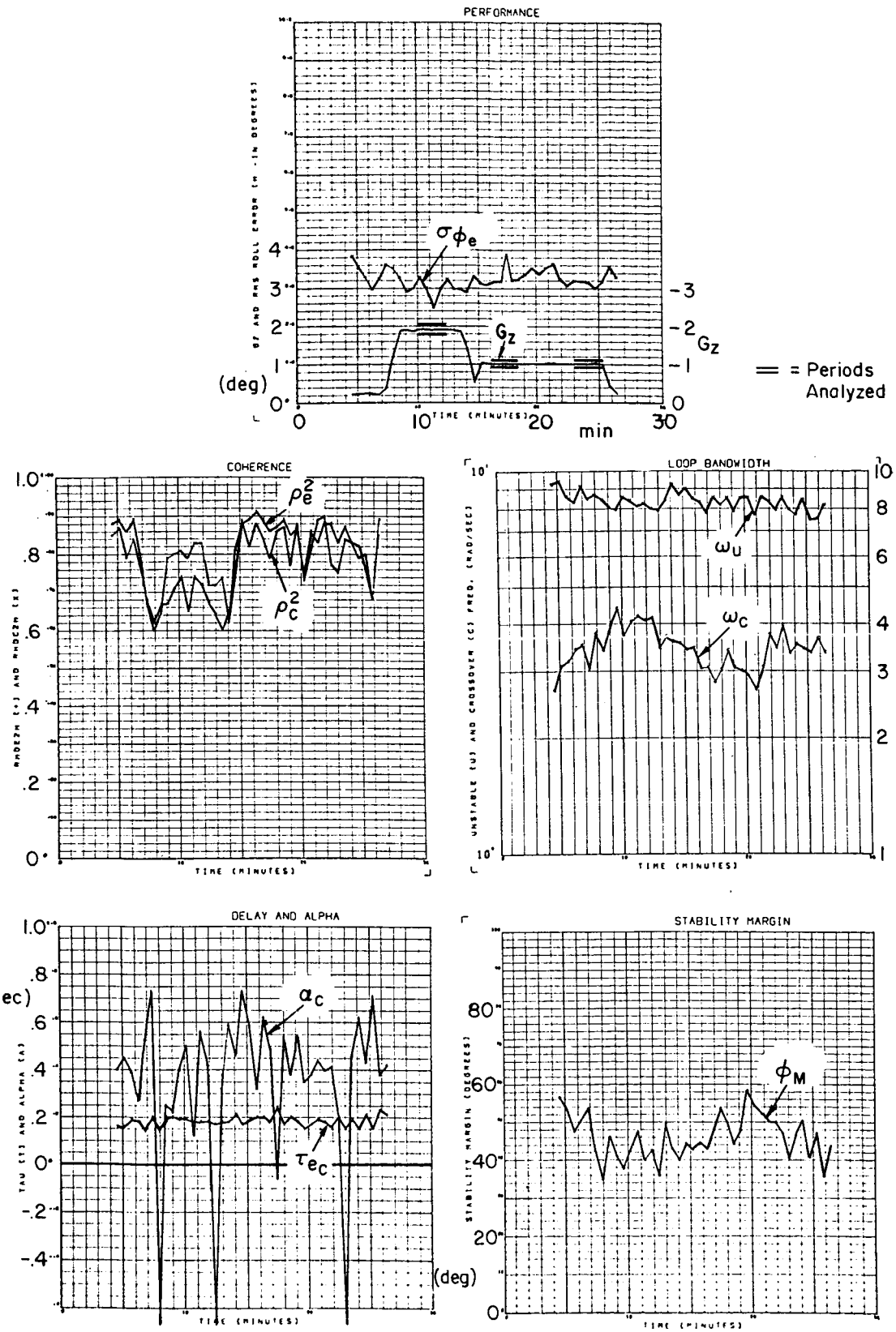


Figure 10. Typical Computer-drawn Plots of Tracking Parameters vs Time (Run G1)

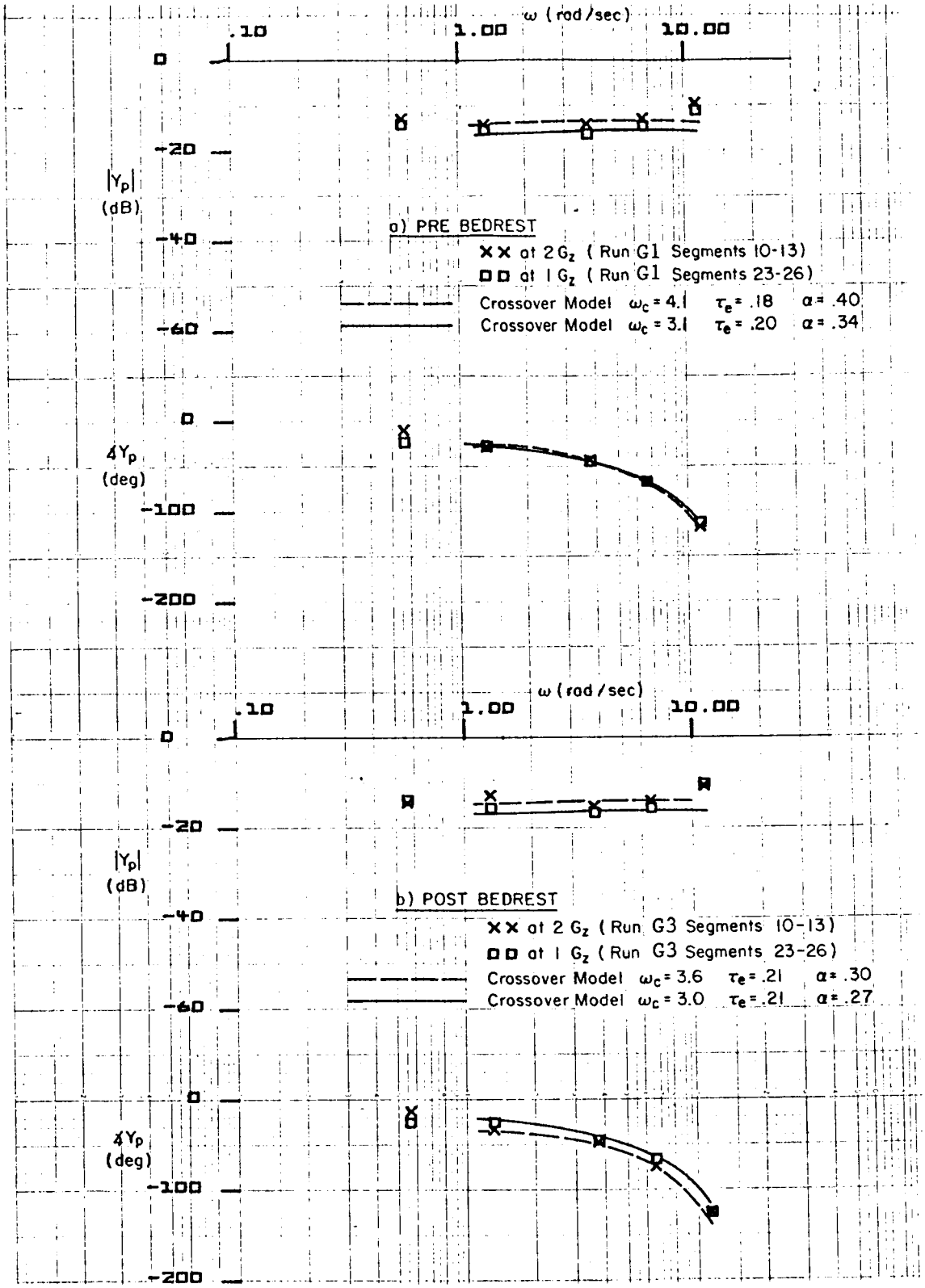


Figure 11. Typical Pilot's Describing Functions and Model Fit (Subject G)

frequently lost control both before and after bedrest. Figure 12 compares the average roll tracking performance among subjects at three periods along the g-profile, from which the pronounced difference of Subject F is obvious. It is also apparent that the remaining seven pilots are fairly evenly matched on an overall basis. After careful consideration, including running of analyses both with and without this subject included, it was decided to drop Subject F from subsequent analyses because his patterns and interactions were grossly atypical of the parent pilot population, and conclusions based on his inclusion would be invalid. Nevertheless, his raw data are contained in Appendix B.

From a study of the preceding type of plots it became apparent that all effects of interest could be found from analyzing three 134-second periods of 4 segments each: one at maximum G_Z, one near the start of the ten-minute 1 G_Z period, and one near the end of this period. These were noted on Fig. 10. One would intuitively expect that effects of G_Z per se would show up by comparison with the start of 1 G_Z, while fatigue effects resulting from any deconditioning and the g stress might show up by the end of the 1 g period, during which the subject has been tracking with maximum attention for more than 15 minutes.

The tracking parameters selected for detailed analysis, for reasons discussed previously were the rms roll control error performance, σ_{φ_e}; the error coherency, $\rho_{\dot{e}}^2$ (or more usefully, the relative remnant fraction, $1-\rho_{\dot{e}}^2$); the pilot-vehicle loop closure gain, ω_c (a measure of closed-loop bandwidth); and the pilot's effective visual-motor delay, τ_e.

C. BEDREST EFFECTS ON CRITICAL-INSTABILITY SCORES

Before proceeding with the detailed analysis of G_Z effects, we will use the Critical Instability data to evaluate the effects of bedrest alone on tracking ability, as indicated by the pre- and post-run Critical Instability scores. In previous experiments, notably one involving four test subjects sealed for 90-days in a self-contained life support chamber (Ref. 4), it has been established that the three-trial average score, λ_c, correlates very highly ($R > 0.8$) with steady tracking parameters such as τ_e and ω_c; and fairly significantly with error variance. Consequently, any decrement in λ_c over the pre-bedrest baselines would indicate a potential

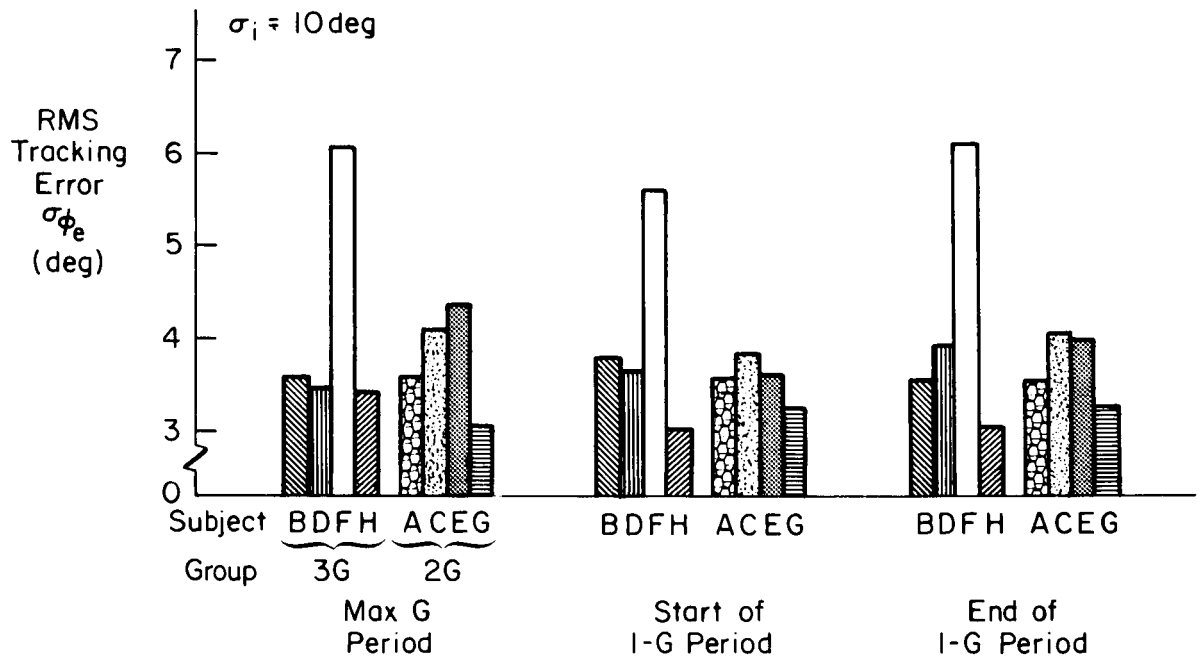


Figure 12. Comparison of Average Roll Tracking Accuracy Among Subjects

loss in performance due to bedrest alone, in addition to any G_z effects. Furthermore, any decrement in the pitch axis score, $\lambda_{c\theta}$, would imply that the fixed subcritical level of λ_x = 2.0 rad/sec would be closer to the pilot's limit and, hence, relatively more stressful.

Figure 13 compares all of the Critical Task Scores (mean of 3 trials) versus Bedrest (Pre- and Post-), with or without g-suits, and the score before and after centrifugation. Recall that all subjects were at 0 G_z (supine) when they performed these tests, and this is actually more stressful (i.e., awkward) than 1 g sitting erect. Bars have been drawn for each group's mean, from which the following conclusions are drawn:

- The overall levels and scatter of the raw scores ($\lambda_{c\theta}$ or $\lambda_{c\varphi} \doteq$ 5-6 rad/sec and $\lambda_D \doteq$ 4 rad/sec) are consistent with past research (Refs. 2 and 5), considering the unusual attitude and analog/digital/analog conversion delays. Also, without Subject F (as here) the 2 g and 3 g groups were fairly well matched.
- There is no systematic effect of any of the experimental variables on the group mean λ_c scores. This implies that 10 days of enforced bedrest produced negligible influence on 0 G_z tracking abilities.
- The subcritical level of pitch axis tracking instability of λ_x = 2.0 remains at 40 percent of the single-axis (and 50 percent of the dual-axis) critical instability limit for all test sessions.
- As in previous research, subjects tend to stratify in scores (note the consistent dominance of Subject G in the 2 g group and Subject D in the 3 g group).

Examining individual scores, pre- and post-run, a possible systematic effect of bedrest was noted:

- Before bedrest, 70 percent of the 42 comparisons* showed slightly improved scores at the post-run trial compared with the pre-run value.
- After bedrest, 62 percent of the comparisons had worse post-run scores.

*Each subject's pre-run value used as his own "control."

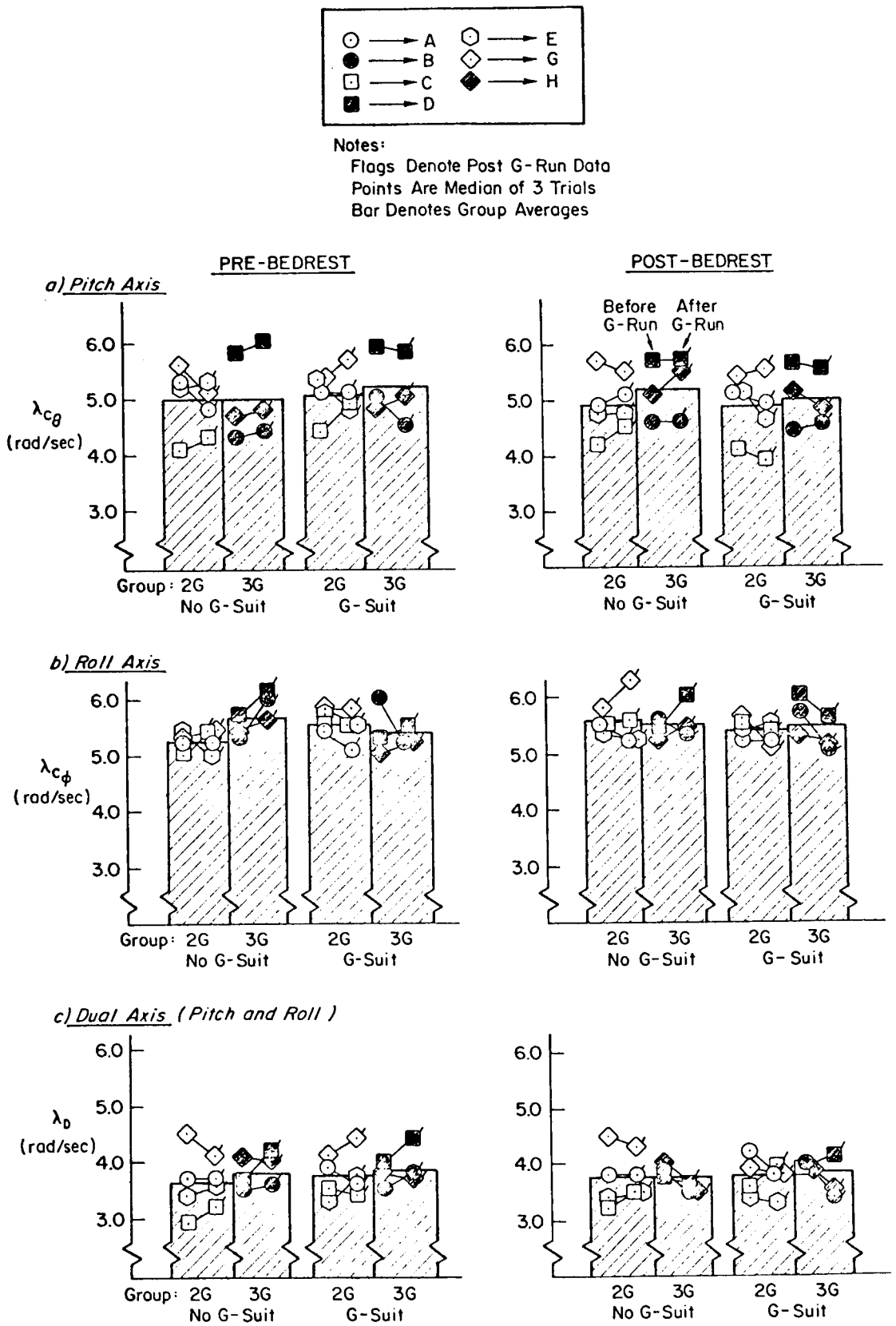


Figure 13. Comparison of Critical Task Scores Versus Bedrest, G-Suits and Pre- and Post-run

This effect was small but significant by a nonparametric McNemar test for individual changes (Ref. 9). This observation could be due to the increased dominance (following bedrest deconditioning) of fatigue or post-G_z stress over the otherwise-present warmup and learning effects.

All in all, it is concluded that at 0 G_z (supine) there is very little effect of wearing g-suits per se, or of 10 days of bedrest per se, on the limiting tracking ability as measured by the Critical Instability scores.

D. EFFECTS OF BEDREST, G-SUITS, AND G-PROFILE ON TRACKING

In this section we will analyze the main tracking results of this experiment. First the data will be presented and discussed, then the Analysis of Variance (ANOV) will be summarized. However, the actual analysis was an interactive blend of graphical interpretations and ANOV implications, so the ANOV will be discussed along with the plots.

It has already been established in earlier sections that the 2 g group and 3 g group (less Subject F) were fairly well matched in λ_c and performance scores at pre-rest conditions. Nevertheless, we have kept these groups separated in the points plotted herein, because it cannot be said a priori that the g effects would be identical for each group. Then, we use bar graphs averaged across both groups to indicate the trends, assuming equivalence of the two groups.

1. Effects of G-Suit

The effects on various tracking measures of wearing g-suit protection at the maximum 2 g or 3 g condition are graphed on expanded scales in Fig. 14, both pre- and post-bedrest. First, consider the bar graphs before bedrest, on the left. It is apparent that at 2 or 3 G_z, g-suits caused neither an improvement nor decrement in any tracking behavior or performance measures. After bedrest (on the right), σ_{φ_e} showed a slight decrease (improvement) when wearing g-suits, and ρ_e^2 a slight increase (improvement), with ω_c unaffected. However, the ANOV (given later) shows that these slight changes were not statistically significant. Somewhat unexpectedly, both 2 g and 3 g groups gave similar results.

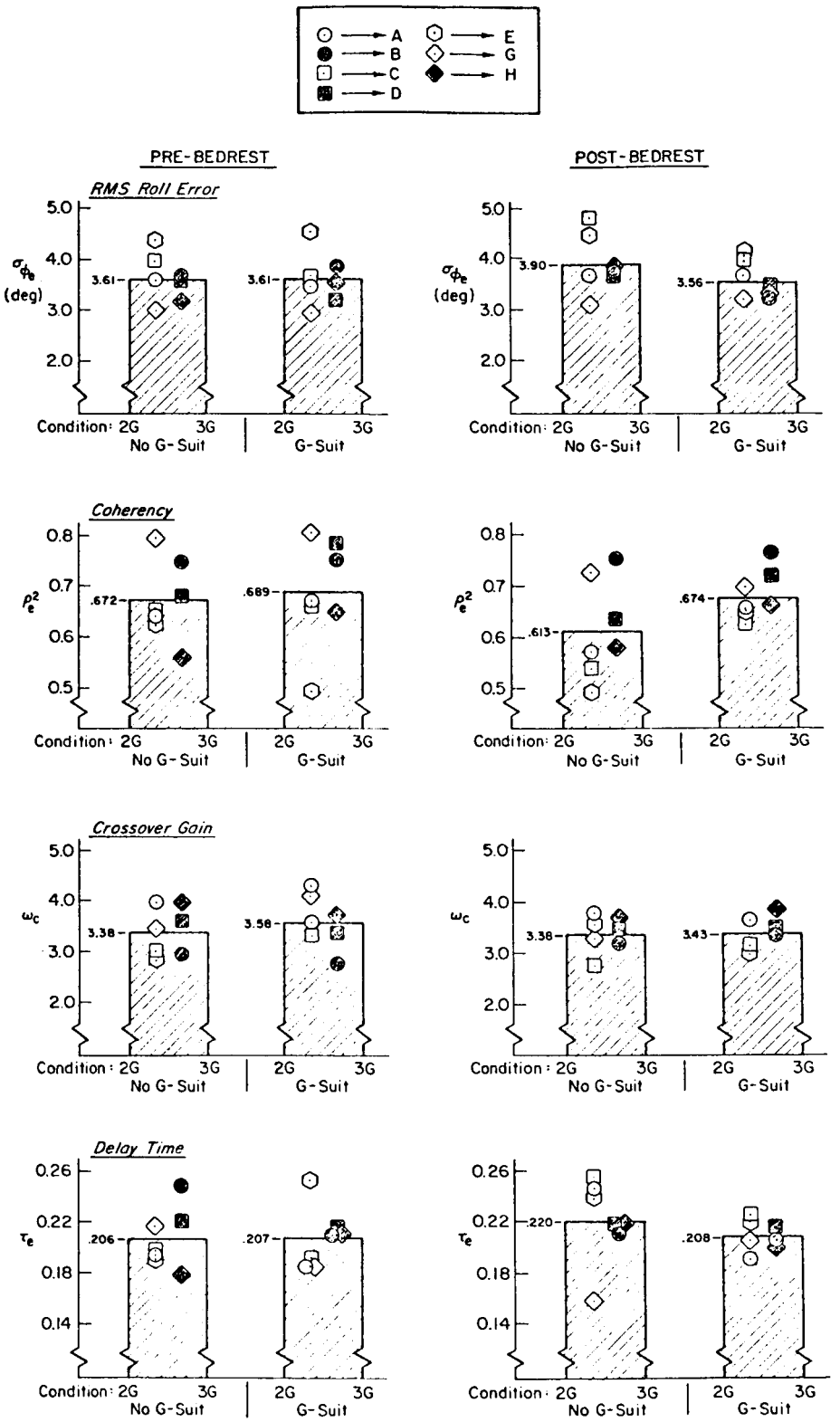


Figure 14. Effects of G-Suit, Pre- and Post-Bedrest at Maximum G Conditions

Considering the equivalence of λ_c scores reported earlier at 0 G_z, plus these results at maximum G_z and similar results at 1 G_z, it is concluded that g-suits neither helped nor hindered tracking ability significantly, before or after bedrest. Consequently, we can pool the with- and without-g-suit data in the subsequent presentations.

2. Effects of G-Profile

Comparisons of tracking parameters, pre- and post-bedrest, versus phase of the G_z-versus-time profile are given in Fig. 15, again to greatly expanded scales to show the small differences. From the left bars, it is apparent that, prior to bedrest, 2 or 3 G_z had little effect on net tracking errors compared to 1 G_z. At max G_z the relative remnant increased (lower coherency, ρ_e^2), as expected. This was traced, via strip chart records, primarily to high-frequency stick motions from G_z effects and from biodynamic "vibration feedthrough" (Ref. 10) due to the moving centrifuge, as well as other visual-motor sources.

It is interesting to note that pre-rest, the crossover gain, ω_c, increased about 10 percent at maximum g, while the delay, τ_e, remained constant. This explains the relatively constant error performance, in spite of increased remnant which is offset by lower correlated tracking errors due to a tighter loop closure.

Let us turn now to the post-rest results (right hand side of Fig. 15), for which one expectation was possible grayout due to deconditioning and subsequently deteriorated performance. No such effects are found, and if anything, the roll performance is very slightly improved after bedrest at the 1 G_z conditions. For the 2 g group there is a slightly adverse effect of bedrest in σ_φ, ρ_e^2, and ω_c which the ANOV shows is statistically significant. Furthermore, at the 1 g cruise condition the performance and tracking parameters are slightly improved over their pre-rest counterparts. Both the 2 g (circle) and 3 g (square) groups show similar effects of G_z profile in Fig. 15, but contrary to intuition, the 3 g group shows more improvement after bedrest than the 2 g group! Consideration of the plots and closed-loop theory suggests that the improvement in roll tracking scores at the start of 1 G_z after bedrest is primarily due to lower delay time and better coherency. One might even venture to conclude that the bedrest improved the 1 G_z tracking ability!

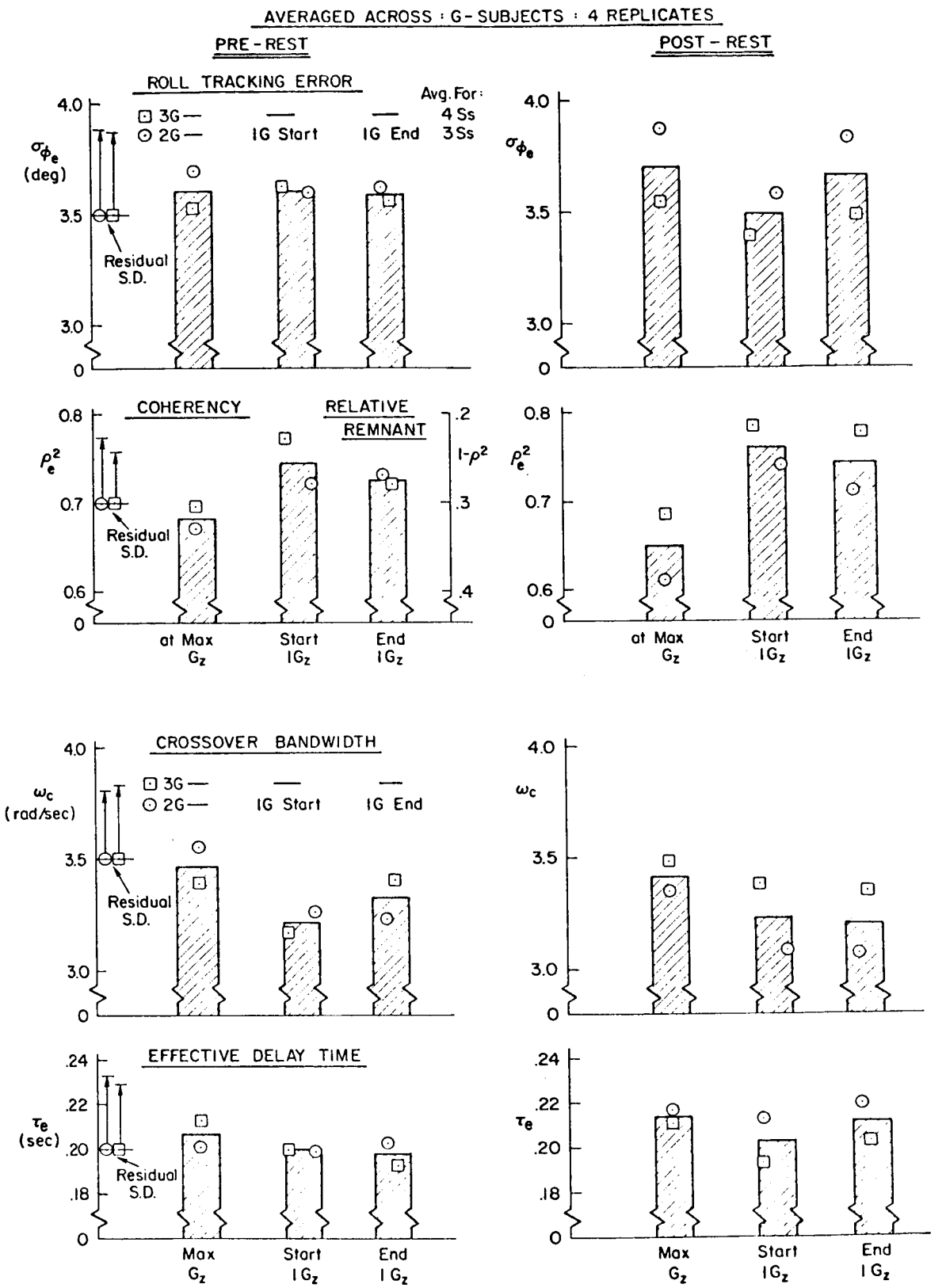


Figure 15. Comparison of the Effects of Profile and Bedrest on Tracking Parameters

Most of the subtle effects of bedrest and g-profile are not statistically significant according to the ANOV. We have placed markers on Fig. 14 indicating the residual standard deviation averaged across 4 serial segments for all conditions in each group, 40+ runs, etc. It is obvious that most of the changes are less than the run-to-run residual, and so statistical significance is naturally hard to prove.

After the early 2 and 3 g runs, some pilots had commented that they found 0 G_z (supine) the most stressful. Some members of the 2 g group said that they preferred 2 G_z over 1 G_z because it "set" them in their seats and braced their arms better than at 1 G_z. None of the pilots shown here blacked out during 2 or 3 G_z following bedrest deconditioning, although a few noted incipient loss of peripheral vision under no g-suit conditions (Ref. 1). Even so, their tracking performance in the primary control task did not reveal any incipient loss of control.

The consistent and comprehensive data presented here force us to conclude that these experienced pilots, well-used to operations beyond 2-3 G_z, did not suffer any effective deconditioning (from the vehicle control point of view) after 10 days of enforced bedrest. This implies that pilots having similar characteristics could manually control a shuttle vehicle throughout reentry, with either a 2 G_z or 3 G_z profile.

2. Analysis of Variance

Concurrently with the foregoing plots, a series of eight Analyses of Variance were performed, using the UCLA Biomedical Computer Program 02V for factorial experimental designs (Ref. 11). Each group, 2 g and 3 g, was analyzed separately for the parameters σ_φ, ρ_e^2, ω_c, and τ_e. The statistical model treated the 4 serial segments as random replicates for the residual variances, the 3 or 4 pilots as random variables, and Bedrest (2 levels, G-Profile (3 levels), and G-Suits (2 levels) as fixed variables. In computing F ratios, all mean squares involving subject effects were ratio'ed with the residual variance. Mean squares not involving subjects were ratio'ed with the respective next highest interaction involving subjects if significant; if not significant, then the effect was ratio'ed to the residual variance.

Table 4 summarizes the results of these ANOV's, with the two G_Z groups superimposed to help reveal consistency. Variability between subjects was the most consistent effect, and only the 2 g group showed any main effect significance on the remaining variables. The profile-by-subject interactions seem to have masked most profile main effects. Finally, review of the detailed ANOV tables in Appendix D verifies that most effects were not much greater than the basic variability of the data base.

TABLE 4

ANALYSIS OF VARIANCE SUMMARY

(Arrows denote increase ↑ or decrease ↓ trend vs. level)

SOURCE OF VARIATION	σ_{φ_e}	ρ_e^2	ω_c	τ_e
Main Effects				
Bedrest (B)	*↑	*↓	***↓	—
Profile Phase (P)	—	***↓	—	—
G Suit (G)	—	—	—	—
Subjects (S)	*** +++	*** +++	*** +++	*** +++
First-Order Interactions				
B × P	—	—	—	—
B × G	+	—	—	—
B × S	—	—	—	*
P × G	—	—	—	—
P × S	*** +++	++	*** +++	—
G × X	***	**	**	—
B × P × G	—	—	—	—
B × P × S	+	*	* ++	—
B × G × S	*	+	—	**
P × G × S	—	* ++	—	—
B × P × G × S	—	* ++	—	—
Residual Standard Deviation (4 Segments)	* = .38° + = .37°	.073 .056	.31 rad/sec .33 rad/sec	.033 sec .029 sec

* = 2 g group (N = 4)
+ = 3 g group (N = 3)

Significance Level: * = 0.05; ** = 0.01; *** = 0.001
+ = 0.05; ++ = 0.01; +++ = 0.001

SECTION IV

CONCLUSIONS

Anticipating potentially deleterious effects of physiological deconditioning from orbital living (simulated here by 10 days of enforced bedrest) upon a shuttle pilot's ability to manually control his aircraft (should that be necessary in an emergency) a comprehensive battery of measurements was made roughly every 1/2 minute on eight military pilot subjects, over two 20-minute reentry G_Z vs. time profiles, one peaking at 2 G_Z and the other at 3 G_Z. Alternate runs were made without and with g-suits to test the help or interference offered by such protective devices. A very demanding two-axis control task was employed, with a subcritical instability in the pitch axis to force a high attentional demand and a severe loss-of-control penalty.

The major conclusions are as follows:

- Effects of 10 days enforced bedrest on various tracking parameters were small and mostly not statistically significant. After bedrest the roll tracking performance was about 10 percent worse at peak G_Z compared with pre-bedrest, but slightly better during the 1 g cruise period.

- Seven subjects analyzed in detail completed the entire reentry without loss of control despite a highly unstable pitch axis. The effects of any grayout, occasionally noted by some subjects without g-suit after bedrest, did not noticeably affect the tracking performance.

- Wearing g-suits neither helped nor hindered tracking ability significantly, either before or after bedrest.

- There was an indication from 0 G_Z Critical Instability Scores that end-of-run fatigue may have increased, following bedrest.

All in all, we feel that these comprehensive and consistent data show that pilots experienced in high G_Z flying can easily handle the shuttle manual control task during 2 G_Z or 3 G_Z reentry profiles, provided the degree of deconditioning is no more than induced by these 10 days of enforced bedrest (Ref. 1). The merit of the low-G_Z reentry afforded by the NASA shuttle concept is reinforced by the results of this experiment.

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APPENDIX A

OPTIMIZATION OF AUTOPACING RATE FOR CRITICAL TASKS

In order to reduce the time required for three trials to a minimum, while retaining a finite period of tracking in the slow (quasi-steady) rate of increase ($\dot{\lambda}$), a brief mini-experiment was performed with the pacing rates increased up to twice the normal rate. Four subjects participated with a random ordering of the pacing rates. When the high rate is increased, the slow rate is increased too, their ratio remaining 4:1.

The results are summarized in Fig. A-1. At the highest rate ($\dot{\lambda}_{hi}$ = 0.4 rad/sec), it was observed that the subjects could not adapt fast enough and their period at slow rate was not long enough to yield a valid average condition. It was found possible to increase the initial level to λ_o = 2.0 rad/sec once the subjects were initially trained. The best compromise for minimal time, high accuracy runs appears to be $\dot{\lambda}_{hi}$ = 0.3 rad/sec^2 (thus $\dot{\lambda}_{lo} \doteq$ 0.075 rad/sec^2), and λ_o = 2.0 rad/sec. A systematic increase in score of about $\Delta\lambda_c$ = 0.05 rad/sec results, compared with the standard pacing rate.

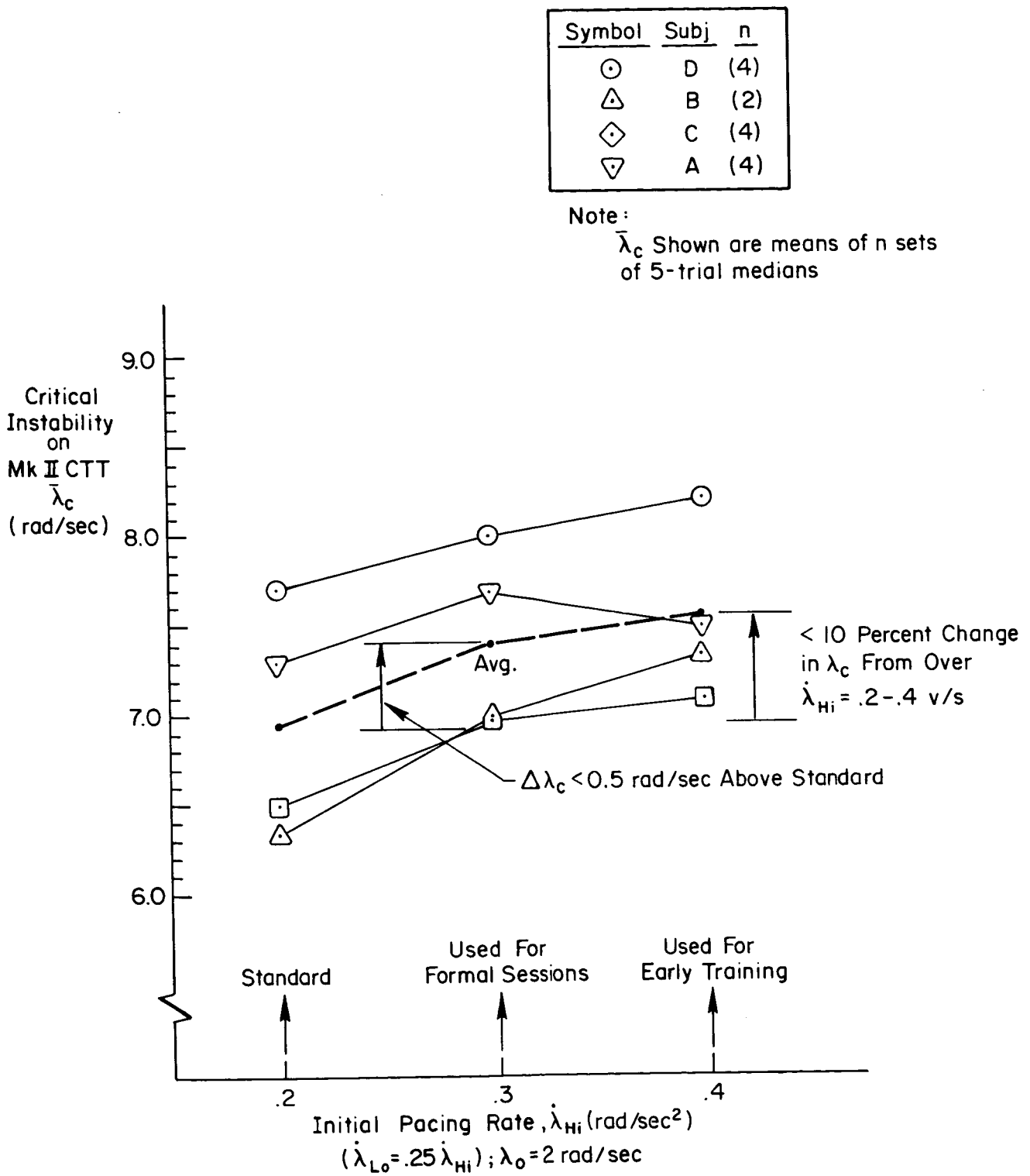

Figure A-1. Effect of Autopacing Rate on Critical Task Scores

APPENDIX B

COMPENDIUM OF SUMMARY TABLES FOR PARAMETERS VERSUS SEGMENTS

For archival purposes, the complete summaries of parameters for each run are given here. The columns are coded as follows:

TABLE B-1

SUMMARY TABLE DEFINITIONS

SUBJECT	See Table 3 and Fig. 2 of text
DATE	Day Month Year
RUN	Chronological from start, including check runs, etc. (See Table B-2 for correlation with Ames Run Code)
SEGMENT	Number of 33.4 second periods
LAMEAN	Mean value of secondary task instability, λ_x
RMSEV	RMS value of error in secondary (vertical control axis) task (Not measured; 0.00 implies N.A.)
RMSEH	RMS value of error in primary (horizontal or roll control axis) task (deg)
RHOE2H	$\rho^2_{e_H}$, error coherence in primary task
RMSCH	RMS value of control stick force in primary (roll) task (Newtons)
RHOC2H	$\rho^2_{c_H}$, stick coherence in primary task
WCH	Crossover frequency in primary task (rad/sec)
WUH	Phase crossover frequency in primary task (rad/sec)
PMARH	Phase margin in primary task (deg)
TAUH	Operator's effective time delay in primary task (sec)
ALPHA	Low-frequency phase droop in primary task (sec^{-1})
GZ	G_z, vertical acceleration of centrifuge cab at start of segment (gravity units)
TIME	Time at start of segment (sec)

TABLE B-2

SUBJECT/RUN NUMBER DESIGNATION

BEDREST CONDITION	MAX G-LEVEL	G-SUIT PROTECTION	GROUP*			
			I		II	
			AM	PM	AM	PM
Pre	2	Yes	A2	C2	E1	G1
		No	A1	C1	E2	G2
	3	Yes	B2	D2	F1	H1
		No	B1	D1	F2	H2
Post	2	Yes	A4	C4	E3	G3
		No	A3	C3	E4	G4
	3	Yes	B4	D4	F3	H3
		No	B3	D3	F4	H4
Post	0 Static Baseline	No	A5	C5	E5	G5
			B5	D5	F5	H5

*Subject "I," whose runs appear among those on the following pages, was a standby, and therefore is not listed in this table.

********** SUMMARY DATA **********

SUBJECT: A DATE: 220572 RUN: A1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.23	0.87	0.57	0.78	3.30	8.03	47.45	0.24	-0.12	0.20	258.88
2	1.47	0.00	3.14	0.83	0.57	0.80	3.57	8.52	46.31	0.21	0.07	0.20	292.48
3	2.00	0.00	3.89	0.72	0.54	0.82	3.07	8.09	53.71	0.19	0.13	0.20	326.08
4	2.00	0.00	4.41	0.55	0.56	0.73	2.79	7.77	61.42	0.15	0.22	0.21	359.68
5	2.00	0.00	3.41	0.70	0.57	0.80	3.36	7.88	51.91	0.19	0.09	0.21	393.28
6	2.00	0.00	3.74	0.65	0.69	0.54	5.15	7.62	36.71	0.19	-0.25	0.21	426.88
7	2.00	0.00	4.59	0.27	1.16	0.22	4.10	7.08	36.25	0.19	0.69	0.77	460.48
8	2.00	0.00	4.06	0.57	0.93	0.40	3.33	7.79	45.77	0.19	0.51	1.75	494.08
9	2.00	0.00	5.26	0.44	1.04	0.36	3.28	7.09	43.46	0.18	0.73	1.87	527.68
10	2.00	0.00	3.37	0.67	0.84	0.46	3.30	7.42	49.20	0.19	0.27	1.87	561.28
11	2.00	0.00	3.98	0.58	0.94	0.46	4.33	7.50	27.90	0.18	1.33	1.87	594.88
12	2.00	0.00	3.66	0.63	0.79	0.47	4.54	7.35	35.17	0.20	0.15	1.87	628.48
13	2.00	0.00	3.33	0.69	0.76	0.52	3.64	7.40	45.41	0.20	0.23	1.87	662.08
14	2.00	0.00	3.40	0.70	0.78	0.46	4.22	8.11	38.67	0.17	0.74	1.87	695.68
15	2.00	0.00	4.05	0.50	0.79	0.46	3.25	7.53	50.26	0.18	0.33	1.87	729.28
16	2.00	0.00	4.18	0.61	0.84	0.41	3.76	7.73	41.48	0.18	0.58	1.92	762.88
17	2.00	0.00	4.79	0.58	0.84	0.45	3.00	7.38	54.13	0.18	0.30	1.90	796.48
18	2.00	0.00	3.80	0.43	1.02	0.27	4.03	6.26	32.08	0.25	-0.00	1.87	830.08
19	2.00	0.00	4.80	0.62	0.68	0.60	2.76	7.64	49.63	0.22	0.30	0.91	863.68
20	2.00	0.00	3.06	0.68	0.62	0.70	3.46	7.81	48.21	0.21	0.05	0.89	897.28
21	2.00	0.00	4.27	0.46	0.80	0.56	3.87	7.59	34.50	0.20	0.83	1.01	930.88
22	2.00	0.00	5.55	0.33	0.97	0.33	4.02	7.42	33.46	0.19	0.88	1.01	964.48
23	2.00	0.00	3.71	0.73	0.61	0.78	3.19	7.86	46.06	0.17	0.68	0.99	998.08
24	2.00	0.00	3.60	0.70	0.71	0.66	3.32	7.54	36.26	0.25	0.40	1.02	1031.68
25	2.00	0.00	3.37	0.74	0.59	0.74	3.36	8.08	42.98	0.19	0.26	1.01	1065.28
26	2.00	0.00	3.06	0.74	0.60	0.77	3.51	7.65	51.42	0.16	0.34	1.01	1098.88
27	2.00	0.00	3.40	0.71	0.59	0.78	2.90	8.13	49.45	0.25	-0.01	1.01	1132.48
28	2.00	0.00	3.63	0.89	0.60	0.81	3.39	8.24	43.86	0.20	0.46	1.00	1166.08
29	2.00	0.00	3.30	0.72	0.63	0.77	3.49	7.03	41.80	0.21	0.40	1.01	1199.68
30	2.00	0.00	3.51	0.76	0.60	0.80	3.47	7.38	46.26	0.19	0.36	1.02	1233.28
31	2.00	0.00	3.48	0.77	0.61	0.72	3.26	6.40	47.18	0.21	0.18	1.02	1266.88
32	2.00	0.00	2.88	0.81	0.59	0.85	3.85	7.41	38.15	0.20	0.54	1.02	1300.48
33	2.00	0.00	3.52	0.70	0.64	0.72	2.97	7.78	44.29	0.20	0.63	1.02	1334.08
34	2.00	0.00	3.40	0.78	0.69	0.70	3.70	7.99	32.10	0.28	-0.05	1.01	1367.68
35	2.00	0.00	3.04	0.80	0.61	0.78	3.43	7.34	42.48	0.23	0.18	0.99	1401.28
36	2.00	0.00	3.98	0.75	0.66	0.74	3.74	7.47	35.97	0.24	0.12	1.01	1434.88
37	2.00	0.00	3.32	0.73	0.64	0.77	3.59	7.69	39.75	0.21	0.39	1.00	1468.48
38	2.00	0.00	3.42	0.73	0.61	0.81	3.52	8.51	44.28	0.19	0.47	1.01	1502.08
39	2.00	0.00	5.71	0.45	0.66	0.60	2.87	7.74	57.78	0.14	0.48	0.72	1535.68
40	2.00	0.00	4.60	0.70	0.63	0.64	2.54	6.04	52.02	0.29	-0.19	0.20	1569.28

********** SUMMARY DATA **********

SUBJECT: B DATE: 220572 RUN: B1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.09	0.85	0.54	0.86	3.39	10.76	51.74	0.18	0.24	0.21	263.20
2	1.30	0.00	3.47	0.82	0.56	0.85	3.09	8.64	47.66	0.19	0.42	0.21	296.80
3	2.00	0.00	4.32	0.83	0.57	0.87	2.50	8.86	46.80	0.20	0.62	0.20	330.40
4	2.00	0.00	3.83	0.85	0.54	0.88	2.64	10.03	50.72	0.20	0.42	0.21	364.00
5	2.00	0.00	4.31	0.83	0.54	0.88	2.55	9.36	54.96	0.16	0.50	0.20	397.60
6	2.00	0.00	5.71	0.75	0.60	0.81	2.33	8.75	52.59	0.18	0.56	0.20	431.20
7	2.00	0.00	4.29	0.75	0.71	0.64	2.93	10.28	47.16	0.16	0.82	0.92	464.80
8	2.00	0.00	3.35	0.72	0.67	0.60	3.18	9.12	45.56	0.22	0.23	1.94	498.40
9	2.00	0.00	5.33	0.54	0.69	0.55	2.74	7.74	52.06	0.18	0.43	2.93	532.00
10	2.00	0.00	3.44	0.73	0.65	0.56	2.83	9.24	49.06	0.29	0.27	2.92	565.60
11	2.00	0.00	3.96	0.65	0.68	0.60	3.23	8.23	43.65	0.23	0.25	2.92	599.20
12	2.00	0.00	3.97	0.77	0.66	0.67	2.96	8.39	45.78	0.21	0.43	2.94	632.80
13	2.00	0.00	3.41	0.83	0.62	0.64	2.73	9.95	47.94	0.26	0.06	2.95	666.40
14	2.00	0.00	3.35	0.83	0.68	0.64	3.66	9.03	40.67	0.22	0.23	2.92	700.00
15	2.00	0.00	3.96	0.64	0.69	0.61	3.24	9.55	47.71	0.19	0.40	2.95	733.60
16	2.00	0.00	3.56	0.73	0.71	0.65	4.11	8.77	35.98	0.13	1.68	2.50	767.20
17	2.00	0.00	4.24	0.66	0.69	0.55	2.40	5.99	45.25	0.21	0.68	1.50	800.80
18	2.00	0.00	3.97	0.76	0.67	0.74	3.26	10.18	42.08	0.17	0.87	0.48	834.40
19	2.00	0.00	4.57	0.85	0.61	0.83	2.86	10.18	46.36	0.21	0.46	0.92	868.00
20	2.00	0.00	4.35	0.87	0.53	0.88	2.43	9.14	58.13	0.16	0.40	1.00	901.60
21	2.00	0.00	3.75	0.75	0.54	0.83	3.07	9.00	50.33	0.22	0.05	1.01	935.20
22	2.00	0.00	3.23	0.77	0.59	0.85	3.51	8.88	42.32	0.20	0.47	1.00	968.80
23	2.00	0.00	3.74	0.81	0.58	0.79	2.87	8.95	47.22	0.22	0.31	1.02	1002.40
24	2.00	0.00	2.98	0.82	0.60	0.85	3.61	8.45	39.64	0.22	0.27	1.02	1036.00
25	2.00	0.00	3.24	0.75	0.59	0.82	3.58	8.43	44.93	0.20	0.24	1.02	1069.60
26	2.00	0.00	3.42	0.82	0.59	0.83	3.46	9.28	44.03	0.19	0.46	1.01	1103.20
27	2.00	0.00	3.28	0.84	0.55	0.82	2.97	8.89	52.78	0.20	0.13	1.01	1136.80
28	2.00	0.00	3.18	0.84	0.61	0.84	3.83	8.77	40.38	0.16	0.93	1.00	1170.40
29	2.00	0.00	3.49	0.84	0.60	0.83	3.08	9.17	42.14	0.20	0.70	1.01	1204.00
30	2.00	0.00	3.43	0.72	0.63	0.77	3.21	8.42	46.36	0.18	0.61	1.00	1237.60
31	2.00	0.00	3.44	0.73	0.62	0.82	3.57	9.15	38.07	0.23	0.34	1.00	1271.20
32	2.00	0.00	3.31	0.70	0.59	0.81	3.52	8.27	43.94	0.18	0.56	1.01	1304.80
33	2.00	0.00	3.59	0.78	0.63	0.81	3.36	8.17	41.59	0.20	0.55	1.01	1338.40
34	2.00	0.00	3.29	0.82	0.62	0.79	3.94	8.71	40.91	0.21	0.05	1.01	1372.00
35	2.00	0.00	3.62	0.74	0.62	0.82	3.43	9.29	41.82	0.21	0.43	1.01	1405.60
36	2.00	0.00	3.36	0.69	0.60	0.79	3.37	9.38	44.59	0.20	0.34	1.01	1439.20
37	2.00	0.00	4.05	0.51	0.66	0.73	3.30	8.52	38.39	0.20	0.77	1.01	1472.80
38	2.00	0.00	3.58	0.62	0.62	0.71	2.97	32.90	44.66	0.22	0.44	0.73	1506.40
39	2.00	0.00	3.34	0.53	0.59	0.74	3.12	8.78	53.92	0.13	0.72	0.20	1540.00

********** SUMMARY DATA **********

SUBJECT: C DATE: 220572 RUN: C1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.25	0.74	0.75	0.63	4.38	8.13	32.88	0.17	1.06	0.20	242.40
2	0.89	0.00	3.63	0.76	0.69	0.72	3.31	9.01	37.72	0.21	0.70	0.22	276.00
3	2.00	0.00	4.67	0.59	0.63	0.67	2.38	6.22	50.26	0.18	0.62	0.22	309.60
4	2.00	0.00	4.76	0.66	0.70	0.69	2.84	6.27	41.09	0.21	0.74	0.21	343.20
5	2.00	0.00	4.15	0.36	0.71	0.50	2.98	6.44	43.20	0.26	0.17	0.20	376.80
6	2.00	0.00	4.49	0.63	0.71	0.67	2.63	7.59	40.83	0.21	0.79	0.22	410.40
7	2.00	0.00	5.61	0.46	0.63	0.60	2.44	6.49	61.79	0.11	0.54	0.42	444.00
8	2.00	0.00	5.60	0.64	0.85	0.44	2.45	4.47	44.28	0.20	0.75	1.28	477.60
9	2.00	0.00	3.60	0.56	0.70	0.46	2.73	5.44	49.08	0.25	0.10	1.87	511.20
10	2.00	0.00	4.09	0.54	0.79	0.47	3.02	4.61	40.49	0.22	0.58	1.87	544.80
11	2.00	0.00	4.04	0.76	0.67	0.63	2.77	8.07	44.78	0.24	0.38	1.87	578.40
12	2.00	0.00	3.87	0.58	0.77	0.50	3.51	7.61	50.90	0.14	0.72	1.92	612.00
13	2.00	0.00	3.89	0.72	0.72	0.50	2.71	8.13	54.08	0.18	0.39	1.90	645.60
14	2.00	0.00	4.33	0.64	0.82	0.54	3.13	7.39	40.31	0.24	0.40	1.87	679.20
15	2.00	0.00	3.70	0.51	0.70	0.52	3.75	6.99	54.18	0.23	-0.92	1.91	712.80
16	2.00	0.00	3.66	0.62	0.72	0.56	3.42	7.14	43.52	0.19	0.60	1.91	746.40
17	2.00	0.00	3.94	0.71	0.73	0.58	2.89	6.88	50.33	0.14	0.83	1.92	780.00
18	2.00	0.00	3.82	0.65	0.73	0.54	3.21	8.01	44.97	0.20	0.42	1.91	813.60
19	2.00	0.00	5.15	0.72	0.57	0.74	1.98	6.89	53.78	0.23	0.37	1.39	847.20
20	2.00	0.00	6.86	0.66	0.58	0.67	1.56	7.33	61.73	0.15	0.42	0.53	880.80
21	2.00	0.00	4.25	0.75	0.60	0.73	2.77	8.38	55.92	0.14	0.56	1.02	914.40
22	2.00	0.00	4.05	0.74	0.63	0.72	2.67	6.51	51.62	0.16	0.64	1.00	948.00
23	2.00	0.00	4.34	0.65	0.67	0.74	3.17	7.53	44.68	0.17	0.83	1.02	981.60
24	2.00	0.00	3.95	0.69	0.66	0.70	3.22	8.40	41.90	0.23	0.34	1.00	1015.20
25	2.00	0.00	2.96	0.76	0.64	0.70	3.30	8.67	51.55	0.15	0.61	0.98	1048.80
26	2.00	0.00	3.37	0.61	0.68	0.69	3.59	7.94	40.94	0.18	0.80	1.02	1082.40
27	2.00	0.00	4.22	0.51	0.68	0.57	2.82	7.68	53.64	0.19	0.26	1.01	1116.00
28	2.00	0.00	3.04	0.75	0.63	0.74	3.15	7.69	44.68	0.21	0.46	1.03	1149.60
29	2.00	0.00	4.42	0.77	0.61	0.75	2.56	7.99	48.07	0.23	0.38	1.01	1183.20
30	2.00	0.00	4.06	0.75	0.65	0.73	3.14	8.68	40.99	0.22	0.50	1.00	1216.80
31	2.00	0.00	3.77	0.66	0.66	0.71	3.15	7.03	46.73	0.14	0.97	1.02	1250.40
32	2.00	0.00	4.39	0.68	0.68	0.67	2.91	6.48	47.61	0.17	0.72	1.03	1284.00
33	2.00	0.00	3.75	0.58	0.76	0.54	2.79	6.54	46.33	0.20	0.54	1.02	1317.60
34	2.00	0.00	4.34	0.68	0.69	0.69	3.03	7.84	40.65	0.23	0.50	1.00	1351.20
35	2.00	0.00	4.15	0.62	0.70	0.64	2.89	8.20	38.75	0.24	0.59	1.03	1384.80
36	2.00	0.00	5.56	0.60	0.58	0.64	2.16	7.70	66.90	0.09	0.43	1.02	1418.40
37	2.00	0.00	4.75	0.55	0.69	0.54	3.12	8.32	61.43	0.10	0.54	1.01	1452.00
38	2.00	0.00	4.10	0.71	0.63	0.72	2.81	8.35	45.99	0.22	0.43	0.99	1485.60
39	2.00	0.00	4.43	0.78	0.55	0.83	2.36	8.66	54.97	0.19	0.38	0.94	1519.20
40	2.00	0.00	4.73	0.68	0.55	0.80	2.54	6.24	54.92	0.17	0.47	0.39	1552.80

********** SUMMARY DATA **********

SUBJECT: D DATE: 220572 RUN: D1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RH0E2H	RMSCH	RH0C2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	2.93	0.78	0.63	0.79	3.89	7.93	38.48	0.17	0.87	0.23	283.44
2	0.74	0.00	3.56	0.56	0.69	0.56	3.60	8.06	42.64	0.22	0.12	0.21	317.04
3	1.82	0.00	4.02	0.36	0.72	0.58	3.83	7.50	44.21	0.21	-0.09	0.23	350.64
4	2.00	0.00	3.33	0.78	0.59	0.83	3.35	7.49	45.54	0.22	0.13	0.22	384.24
5	2.00	0.00	3.51	0.66	0.70	0.65	4.04	7.72	33.37	0.17	1.21	0.21	417.84
6	2.00	0.00	4.89	0.59	0.85	0.45	3.18	8.29	47.64	0.19	0.45	0.51	451.44
7	2.00	0.00	3.36	0.61	0.84	0.46	4.29	8.01	38.54	0.20	0.16	1.52	485.04
8	2.00	0.00	3.62	0.68	0.83	0.45	3.61	6.34	35.61	0.27	-0.07	2.56	518.64
9	2.00	0.00	3.34	0.57	0.83	0.48	4.27	7.55	36.52	0.19	0.56	2.95	552.24
10	2.00	0.00	3.25	0.66	0.83	0.50	3.66	7.51	39.68	0.22	0.29	2.93	585.84
11	2.00	0.00	3.80	0.66	0.85	0.48	3.20	7.34	39.26	0.24	0.36	2.91	619.44
12	2.00	0.00	3.71	0.73	0.83	0.52	3.25	7.38	37.85	0.25	0.37	2.95	653.04
13	2.00	0.00	3.29	0.67	0.83	0.50	4.27	7.64	31.23	0.17	1.20	2.92	686.64
14	2.00	0.00	3.66	0.74	0.84	0.48	3.73	8.04	35.39	0.22	0.43	2.93	720.24
15	2.00	0.00	4.30	0.71	0.77	0.51	3.29	6.52	41.43	0.23	0.30	2.88	753.84
16	2.00	0.00	3.25	0.69	0.75	0.53	3.80	7.93	38.83	0.23	0.24	1.87	787.44
17	2.00	0.00	3.92	0.73	0.69	0.71	3.32	7.39	40.58	0.20	0.63	0.89	821.04
18	2.00	0.00	3.86	0.63	0.61	0.74	3.14	7.54	45.66	0.22	0.29	0.67	854.64
19	2.00	0.00	3.36	0.81	0.63	0.84	3.30	7.76	38.66	0.23	0.40	1.01	888.24
20	2.00	0.00	3.66	0.72	0.60	0.82	3.09	7.31	43.00	0.21	0.54	1.02	921.84
21	2.00	0.00	3.44	0.81	0.57	0.88	3.05	6.83	48.45	0.19	0.42	1.02	955.44
22	2.00	0.00	3.53	0.81	0.62	0.85	3.55	8.00	38.06	0.23	0.32	1.02	989.04
23	2.00	0.00	3.96	0.79	0.57	0.83	2.81	6.61	48.18	0.21	0.36	1.03	1022.64
24	2.00	0.00	4.63	0.58	0.57	0.75	2.61	7.83	53.09	0.20	0.30	1.02	1056.24
25	2.00	0.00	3.37	0.84	0.57	0.90	3.00	7.03	43.71	0.22	0.48	1.04	1089.84
26	2.00	0.00	3.69	0.81	0.58	0.83	2.72	7.10	50.09	0.20	0.41	1.02	1123.44
27	2.00	0.00	4.00	0.85	0.59	0.84	2.78	7.76	46.57	0.24	0.27	1.04	1157.04
28	2.00	0.00	3.24	0.80	0.57	0.82	2.96	8.18	44.79	0.23	0.30	1.02	1190.64
29	2.00	0.00	3.71	0.86	0.58	0.85	3.06	7.19	46.10	0.21	0.41	1.02	1224.24
30	2.00	0.00	4.17	0.76	0.63	0.81	2.91	7.54	40.18	0.25	0.43	1.03	1257.84
31	2.00	0.00	3.21	0.84	0.60	0.85	3.15	6.72	39.09	0.24	0.44	1.02	1291.44
32	2.00	0.00	3.44	0.84	0.62	0.83	3.16	7.52	43.06	0.22	0.44	1.02	1325.04
33	2.00	0.00	4.24	0.80	0.57	0.79	2.67	7.67	52.53	0.20	0.29	1.02	1358.64
34	2.00	0.00	3.44	0.80	0.55	0.87	2.82	7.08	48.18	0.24	0.15	1.03	1392.24
35	2.00	0.00	4.80	0.89	0.53	0.88	2.28	6.54	55.55	0.19	0.37	1.03	1425.84
36	2.00	0.00	4.35	0.68	0.57	0.73	2.80	7.30	53.93	0.21	0.11	1.00	1459.44
37	2.00	0.00	4.94	0.83	0.63	0.82	2.64	7.29	44.49	0.22	0.33	0.94	1493.04
38	2.00	0.00	4.23	0.75	0.61	0.78	2.79	6.81	47.36	0.20	0.53	0.31	1526.64
39	2.00	0.00	4.66	0.77	0.60	0.73	2.68	6.40	50.16	0.23	0.19	0.21	1560.24

********** SUMMARY DATA **********

SUBJECT: E DATE: 230572 RUN: E1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.34	0.74	0.64	0.73	4.06	8.42	39.97	0.20	0.22	0.22	284.68
2	0.74	0.00	3.03	0.73	0.70	0.75	3.99	8.46	31.44	0.14	1.88	0.24	318.28
3	1.99	0.00	3.45	0.57	0.65	0.68	3.22	5.79	44.36	0.18	0.68	0.23	351.88
4	2.00	0.00	4.57	0.46	0.77	0.57	3.29	8.02	39.10	0.21	0.67	0.24	385.48
5	2.00	0.00	4.00	0.44	0.67	0.63	3.69	8.19	47.21	0.16	0.54	0.23	419.08
6	2.00	0.00	4.45	0.51	0.77	0.51	3.23	6.30	38.35	0.26	0.25	0.55	452.68
7	2.00	0.00	4.00	0.47	0.78	0.42	2.88	8.19	44.13	0.28	-0.03	1.53	486.28
8	2.00	0.00	4.00	0.45	0.92	0.35	3.24	8.16	45.23	0.22	0.25	1.89	519.88
9	2.00	0.00	4.12	0.50	0.91	0.37	3.44	7.73	42.80	0.20	0.52	1.90	553.48
10	2.00	0.00	4.08	0.52	0.88	0.47	3.32	8.61	32.86	0.25	0.57	1.93	587.08
11	2.00	0.00	4.81	0.46	0.96	0.42	3.44	7.53	31.55	0.25	0.53	1.91	620.68
12	2.00	0.00	4.75	0.51	0.99	0.37	3.49	7.03	34.86	0.25	0.26	1.92	654.28
13	2.00	0.00	4.44	0.49	1.05	0.39	3.95	5.70	24.29	0.26	0.48	1.87	687.88
14	2.00	0.00	4.03	0.41	1.03	0.33	3.69	6.91	35.74	0.25	0.12	1.92	721.48
15	2.00	0.00	5.27	0.37	1.14	0.20	2.21	7.65	49.25	0.31	0.06	1.92	755.08
16	2.00	0.00	4.38	0.53	0.89	0.41	3.35	5.48	38.57	0.22	0.59	1.90	788.68
17	2.00	0.00	3.56	0.71	0.79	0.50	3.74	7.44	39.56	0.20	0.50	1.90	822.28
18	2.00	0.00	4.19	0.66	0.67	0.64	2.54	6.72	43.69	0.21	0.68	1.13	855.88
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	889.48
20	0.56	0.00	4.40	0.72	0.68	0.74	3.05	6.79	41.45	0.20	0.71	1.04	924.44
21	1.80	0.00	3.28	0.76	0.67	0.77	3.67	8.09	37.97	0.21	0.48	1.03	958.04
22	2.00	0.00	3.13	0.65	0.64	0.61	3.26	8.36	50.45	0.21	0.03	1.04	991.64
23	2.00	0.00	3.80	0.59	0.69	0.68	4.04	8.30	40.58	0.16	0.80	1.03	1025.24
24	2.00	0.00	3.09	0.59	0.71	0.68	3.90	7.78	36.15	0.18	0.91	1.04	1058.84
25	2.00	0.00	3.65	0.65	0.74	0.66	3.74	6.73	31.35	0.25	0.38	1.03	1092.44
26	2.00	0.00	3.85	0.56	0.73	0.61	3.30	6.42	39.21	0.21	0.68	1.04	1126.04
27	2.00	0.00	3.99	0.47	0.71	0.62	3.42	6.76	37.31	0.20	0.86	1.03	1159.64
28	2.00	0.00	3.37	0.59	0.76	0.60	3.81	6.96	37.70	0.22	0.26	1.02	1193.24
29	2.00	0.00	3.60	0.50	0.71	0.64	3.73	8.03	38.34	0.20	0.61	1.04	1226.84
30	2.00	0.00	4.61	0.68	0.74	0.64	3.22	8.19	41.43	0.20	0.66	1.03	1260.44
31	2.00	0.00	3.82	0.72	0.68	0.68	3.28	7.94	41.25	0.21	0.50	1.02	1294.04
32	2.00	0.00	3.50	0.63	0.77	0.69	4.12	7.85	27.27	0.14	2.08	1.03	1327.64
33	2.00	0.00	3.32	0.74	0.68	0.75	3.28	7.77	36.55	0.23	0.59	1.02	1361.24
34	2.00	0.00	4.63	0.52	0.81	0.59	3.06	7.45	33.07	0.25	0.67	1.02	1394.84
35	2.00	0.00	4.04	0.62	0.75	0.67	3.32	7.07	30.97	0.25	0.67	1.03	1428.44
36	2.00	0.00	3.85	0.63	0.79	0.65	3.67	8.61	26.67	0.27	0.39	1.02	1462.04
37	2.00	0.00	4.21	0.70	0.62	0.74	2.59	7.33	46.95	0.18	0.76	1.03	1495.64
38	2.00	0.00	5.16	0.77	0.64	0.63	2.23	7.25	56.80	0.15	0.54	0.85	1529.24
39	2.00	0.00	3.98	0.76	0.68	0.78	2.84	6.99	38.19	0.18	1.11	0.25	1562.84
40	2.00	0.00	4.24	0.65	0.65	0.73	2.75	8.51	40.30	0.23	0.61	0.27	1596.44

SUMMARY DATA

SUBJECT: F DATE: 230572 RUN: F1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RH0E2H	RMSCH	RH0C2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.83	0.72	0.65	0.70	3.49	7.02	41.73	0.21	0.32	0.24	262.52
2	0.63	0.00	5.63	0.61	0.86	0.48	2.97	6.14	33.75	0.30	0.30	0.26	296.12
3	1.42	0.00	5.42	0.35	0.68	0.57	2.68	6.28	50.93	0.25	0.06	0.24	329.72
4	2.00	0.00	5.93	0.46	0.66	0.63	2.80	6.56	46.80	0.22	0.36	0.24	363.32
5	2.00	0.00	8.12	0.19	0.87	0.45	2.94	6.23	35.26	0.26	0.55	0.24	396.92
6	2.00	0.00	6.27	0.51	0.89	0.50	3.04	6.85	37.97	0.23	0.60	0.25	430.52
7	2.00	0.00	5.18	0.68	0.62	0.62	2.35	8.92	55.21	0.21	0.28	0.94	464.12
8	2.00	0.00	4.17	0.79	0.70	0.61	3.22	7.74	43.86	0.21	0.38	1.95	497.72
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.92	531.32
10	0.51	0.00	6.12	0.27	0.97	0.23	2.42	8.03	65.07	0.08	0.56	2.96	583.30
11	1.73	0.00	5.96	0.43	0.97	0.32	2.93	8.74	45.76	0.23	0.32	2.92	616.90
12	2.00	0.00	7.46	0.27	1.15	0.25	2.26	7.50	46.30	0.12	1.11	2.94	650.50
13	2.00	0.00	5.36	0.36	1.20	0.25	4.39	7.30	46.65	0.24	-1.34	2.93	684.10
14	2.00	0.00	4.62	0.39	0.94	0.43	3.77	5.24	29.46	0.32	-0.63	2.93	717.70
15	2.00	0.00	5.62	0.41	0.87	0.38	2.89	6.56	45.71	0.24	0.23	2.96	751.30
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	784.90
17	0.65	0.00	5.27	0.50	0.80	0.51	3.48	4.95	38.54	0.20	0.75	0.42	837.22
18	1.86	0.00	5.14	0.25	0.82	0.41	3.68	5.88	37.87	0.28	-0.50	0.97	870.82
19	2.00	0.00	6.01	0.61	0.78	0.42	2.28	7.57	64.62	0.04	0.79	1.02	904.42
20	2.00	0.00	5.85	0.74	0.81	0.54	2.65	7.62	42.05	0.29	0.18	1.03	938.02
21	2.00	0.00	6.01	0.37	0.87	0.42	2.65	4.23	43.11	0.20	0.78	1.02	971.62
22	2.00	0.00	7.79	0.24	0.93	0.32	2.66	8.65	46.92	0.26	0.19	1.02	1005.22
23	2.00	0.00	6.77	0.42	0.80	0.40	2.31	6.00	49.59	0.24	0.35	1.02	1038.82
24	2.00	0.00	9.27	0.39	0.77	0.36	1.63	8.90	60.29	0.24	0.20	1.02	1072.42
25	2.00	0.00	7.99	0.38	0.73	0.46	2.03	7.52	56.96	0.22	0.27	1.02	1106.02
26	2.00	0.00	7.58	0.66	0.61	0.55	4.41	7.30	66.37	0.29	-3.74	1.02	1139.62
27	2.00	0.00	6.40	0.57	0.85	0.34	2.24	7.60	59.25	0.28	-0.21	1.02	1173.22
28	2.00	0.00	7.23	0.39	0.62	0.41	1.26	9.55	77.48	-0.19	0.57	1.03	1206.82
29	2.00	0.00	6.88	0.80	0.56	0.75	1.39	8.49	51.10	0.28	0.41	1.03	1240.42
30	2.00	0.00	4.97	0.71	0.58	0.65	1.96	5.92	57.48	0.18	0.41	1.02	1274.02
31	2.00	0.00	5.78	0.47	0.61	0.60	2.04	6.79	54.35	0.19	0.46	1.02	1307.62
32	2.00	0.00	5.37	0.35	0.55	0.63	2.37	8.04	59.52	0.23	-0.02	1.03	1341.22
33	2.00	0.00	5.32	0.73	0.57	0.81	2.23	7.87	47.26	0.24	0.45	1.02	1374.82
34	2.00	0.00	5.22	0.81	0.54	0.77	1.95	5.93	54.99	0.26	0.21	1.03	1408.42
35	2.00	0.00	5.42	0.76	0.57	0.80	1.84	7.32	46.85	0.31	0.35	1.02	1442.02
36	2.00	0.00	5.95	0.58	0.80	0.52	2.42	7.36	35.77	0.32	0.39	1.03	1475.62
37	2.00	0.00	5.95	0.73	0.60	0.80	2.48	7.54	56.94	0.12	0.67	0.71	1509.22
38	2.00	0.00	4.44	0.82	0.53	0.81	2.30	6.52	56.20	0.19	0.37	0.24	1542.82
39	2.00	0.00	4.81	0.62	0.55	0.74	2.31	7.90	55.63	0.21	0.24	0.25	1576.42

********** SUMMARY DATA **********

SUBJECT: G DATE: 230572 RUN: G1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.83	0.85	0.53	0.88	2.67	9.24	56.56	0.16	0.40	0.23	274.34
2	1.40	0.00	3.53	0.87	0.56	0.89	3.09	9.40	53.31	0.16	0.45	0.24	307.94
3	2.00	0.00	3.27	0.79	0.56	0.86	3.18	8.59	47.53	0.19	0.39	0.25	341.54
4	2.00	0.00	2.96	0.84	0.55	0.89	3.42	8.31	50.65	0.18	0.27	0.23	375.14
5	2.00	0.00	3.24	0.77	0.58	0.80	3.51	9.14	53.47	0.14	0.53	0.23	408.74
6	2.00	0.00	3.61	0.67	0.69	0.68	3.02	8.48	42.17	0.20	0.73	0.40	442.34
7	2.00	0.00	3.52	0.60	0.75	0.62	3.76	8.68	34.73	0.14	1.71	1.23	475.94
8	2.00	0.00	3.26	0.65	0.66	0.67	3.40	8.44	46.09	0.20	0.25	1.87	509.54
9	2.00	0.00	2.91	0.79	0.68	0.67	3.94	8.05	41.02	0.20	0.22	1.89	543.14
10	2.00	0.00	2.98	0.80	0.65	0.71	4.38	7.94	37.72	0.19	0.40	1.87	576.74
11	2.00	0.00	3.28	0.81	0.69	0.74	3.73	8.54	42.32	0.19	0.50	1.92	610.34
12	2.00	0.00	3.00	0.79	0.67	0.65	4.05	8.40	47.30	0.18	0.13	1.92	643.94
13	2.00	0.00	2.49	0.83	0.63	0.74	4.18	8.11	39.94	0.18	0.56	1.90	677.54
14	2.00	0.00	2.99	0.83	0.64	0.72	4.08	8.23	42.57	0.18	0.42	1.91	711.14
15	2.00	0.00	3.23	0.72	0.72	0.67	4.13	7.99	35.80	0.17	1.04	1.91	744.74
16	2.00	0.00	2.97	0.72	0.69	0.64	3.45	7.89	49.49	0.18	0.32	1.90	778.34
17	2.00	0.00	2.96	0.74	0.71	0.60	3.70	8.38	42.78	0.18	0.59	1.87	811.94
18	2.00	0.00	2.90	0.62	0.66	0.65	3.59	9.22	39.88	0.21	0.46	1.40	845.54
19	2.00	0.00	3.30	0.77	0.63	0.81	3.54	8.66	44.33	0.17	0.73	0.51	879.14
20	2.00	0.00	3.11	0.89	0.59	0.88	3.41	8.97	42.63	0.19	0.59	1.04	912.74
21	2.00	0.00	3.08	0.82	0.56	0.89	3.44	8.47	44.50	0.20	0.32	1.02	946.34
22	2.00	0.00	3.16	0.88	0.57	0.91	3.05	8.28	42.92	0.20	0.62	1.02	979.94
23	2.00	0.00	3.17	0.84	0.56	0.89	3.06	7.78	48.42	0.18	0.49	1.02	1013.54
24	2.00	0.00	3.89	0.79	0.53	0.86	2.80	8.54	53.49	0.24	-0.06	1.03	1047.14
25	2.00	0.00	3.19	0.86	0.58	0.87	3.03	8.17	40.94	0.17	0.51	1.02	1080.74
26	2.00	0.00	3.22	0.87	0.57	0.89	3.39	8.52	44.27	0.20	0.38	1.02	1114.34
27	2.00	0.00	3.35	0.77	0.57	0.85	3.06	7.85	47.85	0.18	0.54	1.03	1147.94
28	2.00	0.00	3.52	0.88	0.53	0.87	3.00	8.50	58.36	0.15	0.35	1.02	1181.54
29	2.00	0.00	3.37	0.73	0.58	0.75	2.89	8.51	54.11	0.17	0.38	1.02	1215.14
30	2.00	0.00	3.53	0.82	0.55	0.86	2.67	7.71	52.11	0.19	0.44	1.03	1248.74
31	2.00	0.00	3.63	0.89	0.57	0.83	3.07	8.55	50.06	0.18	0.40	1.04	1282.34
32	2.00	0.00	3.22	0.90	0.57	0.88	3.74	8.35	49.97	0.16	0.41	1.02	1315.94
33	2.00	0.00	3.05	0.77	0.56	0.88	3.45	7.92	47.18	0.20	0.20	1.02	1349.54
34	2.00	0.00	3.19	0.75	0.63	0.83	3.95	8.54	40.44	0.15	1.07	1.02	1383.14
35	2.00	0.00	3.17	0.84	0.57	0.87	3.34	7.95	46.46	0.19	0.46	1.02	1416.74
36	2.00	0.00	3.14	0.83	0.61	0.83	3.53	7.70	50.29	0.15	0.62	1.02	1450.34
37	2.00	0.00	2.98	0.79	0.61	0.82	3.43	8.43	40.70	0.21	0.43	1.04	1483.94
38	2.00	0.00	3.17	0.80	0.65	0.76	3.35	7.47	47.18	0.16	0.71	1.00	1517.54
39	2.00	0.00	3.55	0.68	0.71	0.68	3.66	7.53	35.67	0.23	0.38	0.44	1551.14
40	2.00	0.00	3.28	0.85	0.58	0.89	3.35	8.15	43.44	0.21	0.42	0.24	1584.74

********** SUMMARY DATA **********

SUBJECT: H DATE: 230572 RUN: H1 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.72	0.74	0.76	0.54	2.95	9.47	55.39	0.14	0.54	0.23	253.18
2	1.51	0.00	3.52	0.50	0.96	0.39	3.74	8.76	46.17	0.18	0.37	0.24	286.78
3	2.00	0.00	3.28	0.68	0.80	0.50	3.46	8.90	51.38	0.15	0.49	0.24	320.38
4	2.00	0.00	3.30	0.67	0.88	0.52	4.08	10.35	35.01	0.19	0.75	0.24	353.98
5	2.00	0.00	2.76	0.65	0.77	0.53	3.84	9.82	44.58	0.18	0.44	0.26	387.58
6	2.00	0.00	3.27	0.69	0.79	0.50	3.98	8.41	46.86	0.20	-0.14	0.25	421.18
7	2.00	0.00	3.28	0.61	0.82	0.46	4.62	7.62	39.41	0.19	0.05	0.64	454.78
8	2.00	0.00	3.61	0.64	0.93	0.42	3.63	9.37	43.55	0.20	0.29	1.65	488.38
9	2.00	0.00	3.61	0.52	0.99	0.35	3.81	8.85	38.92	0.14	1.31	2.66	521.98
10	2.00	0.00	3.72	0.58	1.08	0.42	3.32	8.34	40.12	0.22	0.47	2.94	555.58
11	2.00	0.00	3.29	0.65	0.81	0.49	3.49	7.96	38.47	0.22	0.40	2.96	589.18
12	2.00	0.00	3.29	0.74	0.82	0.49	4.33	8.43	41.79	0.15	0.84	2.93	622.78
13	2.00	0.00	3.80	0.63	1.01	0.37	3.71	8.81	33.48	0.25	0.26	2.94	656.38
14	2.00	0.00	3.65	0.56	0.87	0.42	3.57	8.10	42.21	0.21	0.36	2.95	689.98
15	2.00	0.00	4.00	0.51	1.13	0.25	3.46	7.42	44.47	0.17	0.71	2.92	723.58
16	2.00	0.00	3.55	0.54	0.87	0.39	3.87	6.95	41.16	0.23	-0.12	2.79	757.18
17	2.00	0.00	3.50	0.59	0.75	0.56	2.97	7.75	40.73	0.20	0.76	1.82	790.78
18	2.00	0.00	4.24	0.48	0.76	0.43	2.71	5.38	51.47	0.17	0.58	0.79	824.38
19	2.00	0.00	3.22	0.70	0.76	0.58	3.37	8.57	41.22	0.22	0.40	0.77	857.98
20	2.00	0.00	3.56	0.58	0.86	0.43	2.82	7.41	61.92	0.09	0.68	1.02	891.58
21	2.00	0.00	3.47	0.51	0.89	0.38	3.88	7.91	45.12	0.21	-0.14	1.02	925.18
22	2.00	0.00	3.42	0.61	0.82	0.50	4.28	8.67	46.42	0.19	-0.21	1.02	958.78
23	2.00	0.00	2.82	0.71	0.74	0.61	4.51	7.67	34.05	0.22	-0.03	1.02	992.38
24	2.00	0.00	3.31	0.71	0.82	0.50	3.37	8.33	46.01	0.19	0.41	1.03	1025.98
25	2.00	0.00	3.33	0.68	0.75	0.62	3.20	8.56	50.73	0.15	0.63	1.02	1059.58
26	2.00	0.00	3.20	0.76	0.71	0.61	3.39	8.23	47.21	0.19	0.35	1.02	1093.18
27	2.00	0.00	3.57	0.70	0.82	0.61	4.05	8.80	33.50	0.16	1.36	1.03	1126.78
28	2.00	0.00	3.35	0.47	0.85	0.47	4.80	8.63	37.66	0.14	1.05	1.03	1160.38
29	2.00	0.00	3.01	0.71	0.73	0.64	3.57	8.23	38.16	0.24	0.17	1.02	1193.98
30	2.00	0.00	2.73	0.78	0.69	0.71	3.82	8.17	36.66	0.18	0.94	1.03	1227.58
31	2.00	0.00	3.43	0.68	0.76	0.58	3.41	7.81	41.45	0.22	0.36	1.03	1261.18
32	2.00	0.00	3.23	0.63	0.79	0.55	3.83	8.27	32.82	0.14	1.74	1.04	1294.78
33	2.00	0.00	2.89	0.64	0.80	0.52	4.36	9.02	40.81	0.14	1.11	1.02	1328.38
34	2.00	0.00	2.81	0.73	0.77	0.62	4.22	8.33	38.86	0.19	0.42	1.03	1361.98
35	2.00	0.00	2.91	0.68	0.74	0.65	4.14	7.35	31.39	0.20	0.79	1.02	1395.58
36	2.00	0.00	2.80	0.67	0.77	0.58	4.12	8.97	40.41	0.11	1.66	1.03	1429.18
37	2.00	0.00	3.42	0.48	0.73	0.55	3.68	7.86	43.02	0.20	0.34	1.03	1462.78
38	2.00	0.00	3.64	0.75	0.77	0.60	3.68	8.34	43.88	0.17	0.65	0.90	1496.38
39	2.00	0.00	3.12	0.74	0.76	0.63	4.09	7.97	34.07	0.18	0.96	0.24	1529.98

********** SUMMARY DATA **********

SUBJECT: I DATE: 230572 RUN: 11 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RH0E2H	RMSCH	RH0C2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	2.73	0.84	0.56	0.87	3.81	10.43	46.63	0.14	0.81		283.62
2	1.66	0.00	2.39	0.80	0.59	0.83	4.02	9.00	42.65	0.18	0.49		317.22
3	2.00	0.00	2.47	0.87	0.60	0.87	4.04	9.48	41.01	0.15	1.00		350.82
4	2.00	0.00	2.75	0.80	0.57	0.81	3.36	8.74	48.10	0.18	0.42		384.42
5	2.00	0.00	3.25	0.85	0.58	0.83	3.49	9.04	44.90	0.22	0.03		418.02
6	2.00	0.00	2.89	0.87	0.60	0.86	3.92	8.61	40.68	0.18	0.67		451.62
7	2.00	0.00	3.02	0.84	0.56	0.88	3.60	7.94	44.17	0.21	0.15		485.22
8	2.00	0.00	2.99	0.89	0.57	0.89	3.57	7.78	44.87	0.19	0.41		518.82
9	2.00	0.00	2.62	0.88	0.56	0.89	3.60	8.16	45.51	0.20	0.22		552.42
10	2.00	0.00	2.50	0.86	0.58	0.88	4.15	8.92	39.57	0.15	1.09		586.02
11	2.00	0.00	2.75	0.86	0.57	0.86	3.92	8.76	43.77	0.16	0.73		619.62
12	2.00	0.00	2.73	0.86	0.55	0.88	3.42	8.42	46.10	0.21	0.13		653.22
13	2.00	0.00	2.88	0.86	0.56	0.90	3.54	8.36	42.27	0.23	0.02		686.82
14	2.00	0.00	3.26	0.91	0.53	0.90	3.25	8.18	51.36	0.19	0.20		720.42
15	2.00	0.00	3.20	0.83	0.56	0.87	3.73	8.32	42.96	0.22	0.03		754.02
16	2.00	0.00	2.81	0.83	0.56	0.89	3.51	8.31	47.55	0.18	0.34		787.62
17	2.00	0.00	3.00	0.81	0.56	0.83	3.42	8.46	50.24	0.19	0.11		821.22
18	2.00	0.00	2.63	0.86	0.54	0.90	3.85	8.32	47.68	0.16	0.42		854.82
19	2.00	0.00	2.78	0.83	0.57	0.86	3.89	8.17	42.76	0.19	0.39		888.42
20	2.00	0.00	3.33	0.85	0.52	0.87	3.44	8.01	52.02	0.19	-0.01	GZ = 1.00	922.02
21	2.00	0.00	3.02	0.86	0.53	0.88	3.29	7.98	52.60	0.17	0.28		955.62
22	2.00	0.00	2.52	0.87	0.57	0.88	3.60	8.10	42.18	0.18	0.56		989.22
23	2.00	0.00	2.70	0.84	0.58	0.86	4.27	8.68	39.85	0.15	1.09		1022.82
24	2.00	0.00	2.32	0.76	0.56	0.89	3.98	8.24	42.11	0.16	0.86		1056.42
25	2.00	0.00	3.21	0.82	0.59	0.85	3.59	8.18	41.40	0.22	0.22		1090.02
26	2.00	0.00	2.77	0.85	0.57	0.86	3.55	8.14	45.69	0.19	0.34		1123.62
27	2.00	0.00	2.93	0.89	0.59	0.88	4.16	7.85	37.17	0.20	0.36		1157.22
28	2.00	0.00	2.80	0.91	0.57	0.90	3.61	8.31	42.10	0.22	0.12		1190.82
29	2.00	0.00	2.59	0.82	0.58	0.89	3.58	7.91	39.59	0.24	0.12		1224.42
30	2.00	0.00	2.70	0.90	0.58	0.86	3.82	7.85	44.39	0.19	0.27		1258.02
31	2.00	0.00	2.85	0.84	0.59	0.87	4.02	8.06	37.99	0.18	0.76		1291.62
32	2.00	0.00	2.71	0.80	0.59	0.87	3.88	8.44	37.10	0.15	1.31		1325.22
33	2.00	0.00	2.52	0.83	0.58	0.88	3.96	7.73	36.48	0.18	0.83		1358.82
34	2.00	0.00	2.79	0.77	0.58	0.88	3.71	8.41	38.66	0.22	0.33		1392.42
35	2.00	0.00	2.80	0.82	0.56	0.86	3.51	8.10	41.94	0.23	0.12		1426.02
36	2.00	0.00	2.97	0.85	0.59	0.89	3.58	7.39	41.17	0.20	0.52		1459.62
37	2.00	0.00	3.06	0.88	0.58	0.89	3.38	7.68	41.45	0.21	0.45		1493.22
38	2.00	0.00	2.84	0.82	0.62	0.85	3.70	7.72	36.33	0.23	0.34		1526.82
39	2.00	0.00	3.39	0.80	0.55	0.89	3.29	7.58	44.12	0.24	0.06		1560.42

********** SUMMARY DATA **********

SUBJECT: A DATE: 240572 RUN: A2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMAXH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.36	0.73	0.64	0.79	3.26	7.33	39.07	0.22	0.51	0.20	280.90
2	1.28	0.00	3.51	0.85	0.58	0.75	2.84	7.97	55.01	0.15	0.51	0.20	314.50
3	2.00	0.00	3.84	0.90	0.53	0.86	2.71	8.16	55.64	0.20	0.16	0.20	348.10
4	2.00	0.00	3.49	0.82	0.57	0.85	3.07	7.46	48.75	0.19	0.43	0.21	381.70
5	2.00	0.00	4.01	0.81	0.58	0.78	3.27	7.93	49.77	0.18	0.34	0.20	415.30
6	2.00	0.00	3.46	0.66	0.68	0.62	3.62	7.27	49.89	0.16	0.48	0.45	448.90
7	2.00	0.00	3.25	0.82	0.76	0.53	3.54	7.61	50.26	0.19	0.12	1.42	482.50
8	2.00	0.00	3.42	0.73	0.72	0.46	2.95	8.56	60.89	0.15	0.23	1.87	516.10
9	2.00	0.00	3.66	0.73	0.74	0.51	3.48	7.22	55.08	0.15	0.28	1.87	549.70
10	2.00	0.00	3.82	0.79	0.77	0.49	3.26	7.57	48.56	0.20	0.24	1.87	583.30
11	2.00	0.00	3.37	0.60	0.76	0.47	4.39	7.78	41.14	0.18	0.27	1.88	616.90
12	2.00	0.00	3.38	0.71	0.86	0.46	5.22	7.85	28.99	0.17	0.95	1.87	650.50
13	2.00	0.00	3.24	0.59	0.82	0.51	4.29	7.70	34.55	0.19	0.66	1.87	684.10
14	2.00	0.00	2.97	0.65	0.81	0.48	4.31	7.24	44.24	0.23	-0.88	1.87	717.70
15	2.00	0.00	3.57	0.72	0.73	0.55	3.20	7.51	49.61	0.19	0.31	1.90	751.30
16	2.00	0.00	3.26	0.74	0.75	0.57	3.67	7.64	48.40	0.17	0.35	1.87	784.90
17	2.00	0.00	3.76	0.59	0.79	0.43	3.21	7.87	45.77	0.24	0.05	1.87	818.50
18	2.00	0.00	3.54	0.80	0.69	0.64	3.71	7.43	42.66	0.18	0.57	1.25	852.10
19	2.00	0.00	3.53	0.71	0.64	0.71	3.53	8.23	41.47	0.21	0.34	0.65	885.70
20	2.00	0.00	3.55	0.77	0.59	0.78	3.07	7.21	48.27	0.21	0.23	1.00	919.30
21	2.00	0.00	3.56	0.79	0.58	0.77	2.85	7.41	54.29	0.19	0.20	1.01	952.90
22	2.00	0.00	3.68	0.78	0.63	0.77	3.49	7.93	42.76	0.20	0.43	1.00	986.50
23	2.00	0.00	3.66	0.76	0.62	0.71	2.91	6.65	49.32	0.20	0.38	0.99	1020.10
24	2.00	0.00	3.54	0.75	0.58	0.81	2.93	7.24	48.61	0.22	0.25	1.01	1053.70
25	2.00	0.00	3.47	0.65	0.57	0.76	3.00	8.28	51.27	0.19	0.27	1.01	1087.30
26	2.00	0.00	3.96	0.75	0.59	0.81	2.99	7.55	45.46	0.24	0.16	1.01	1120.90
27	2.00	0.00	2.92	0.79	0.59	0.84	3.24	7.15	44.25	0.21	0.36	1.00	1154.50
28	2.00	0.00	3.54	0.65	0.67	0.66	3.18	7.34	45.00	0.24	0.08	1.01	1188.10
29	2.00	0.00	3.22	0.72	0.63	0.72	3.96	8.03	38.67	0.17	0.86	1.00	1221.70
30	2.00	0.00	3.12	0.79	0.62	0.74	3.37	7.71	44.47	0.22	0.22	1.00	1255.30
31	2.00	0.00	3.19	0.70	0.61	0.71	3.06	6.91	50.50	0.20	0.23	0.99	1288.90
32	2.00	0.00	4.38	0.75	0.68	0.71	3.15	8.31	39.67	0.22	0.63	1.02	1322.50
33	2.00	0.00	4.02	0.78	0.62	0.77	3.10	7.91	44.63	0.22	0.32	1.01	1356.10
34	2.00	0.00	3.24	0.86	0.58	0.80	3.21	8.36	44.30	0.22	0.25	0.99	1389.70
35	2.00	0.00	3.99	0.85	0.59	0.82	2.89	7.32	46.37	0.23	0.30	1.00	1423.30
36	2.00	0.00	3.24	0.67	0.71	0.59	3.58	8.53	37.13	0.24	0.22	1.02	1456.90
37	2.00	0.00	3.05	0.72	0.68	0.73	4.04	7.66	35.22	0.19	0.79	1.01	1490.50
38	2.00	0.00	3.25	0.72	0.64	0.71	3.16	8.15	43.97	0.23	0.24	0.90	1524.10
39	2.00	0.00	2.87	0.78	0.58	0.79	3.11	7.45	53.21	0.16	0.41	0.26	1557.70
40	2.00	0.00	4.52	0.54	0.74	0.62	3.00	6.81	42.40	0.16	1.08	0.20	1591.30

SUMMARY DATA

SUBJECT: B DATE: 240572 RUN: B2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHAPH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	4.46	0.85	0.51	0.87	2.58	10.77	62.11	0.16	0.19	0.20	261.20
2	1.70	0.00	3.93	0.76	0.49	0.86	2.48	10.30	63.48	0.15	0.20	0.20	294.80
3	2.00	0.00	4.51	0.90	0.50	0.90	2.37	9.34	61.01	0.17	0.24	0.21	328.40
4	2.00	0.00	4.33	0.83	0.55	0.86	2.56	9.58	50.21	0.20	0.44	0.20	362.00
5	2.00	0.00	3.36	0.83	0.58	0.81	3.08	10.18	48.53	0.20	0.31	0.20	395.60
6	2.00	0.00	4.50	0.71	0.61	0.76	2.75	7.89	46.06	0.22	0.47	0.20	429.20
7	2.00	0.00	3.63	0.80	0.62	0.74	2.95	8.75	48.45	0.19	0.50	0.86	462.80
8	2.00	0.00	4.00	0.87	0.60	0.79	2.68	8.53	48.43	0.21	0.45	1.87	496.40
9	2.00	0.00	4.29	0.87	0.63	0.71	3.11	8.77	55.47	0.13	0.61	2.89	530.00
10	2.00	0.00	3.84	0.81	0.58	0.73	2.52	7.38	54.38	0.16	0.57	2.92	563.60
11	2.00	0.00	4.16	0.70	0.58	0.71	2.66	8.03	50.98	0.23	0.22	2.92	597.20
12	2.00	0.00	3.31	0.77	0.61	0.71	2.90	9.35	46.90	0.22	0.35	2.91	630.80
13	2.00	0.00	4.19	0.73	0.59	0.74	2.96	7.38	49.14	0.23	0.09	2.92	664.40
14	2.00	0.00	3.86	0.72	0.59	0.68	3.04	7.99	52.63	0.23	-0.12	2.93	698.00
15	2.00	0.00	3.71	0.81	0.60	0.68	3.42	8.36	50.37	0.22	-0.23	2.93	731.60
16	2.00	0.00	3.62	0.79	0.65	0.68	2.94	7.12	41.30	0.23	0.48	2.54	765.20
17	2.00	0.00	4.44	0.79	0.62	0.62	2.68	8.75	55.69	0.24	-0.08	1.55	798.80
18	2.00	0.00	4.53	0.61	0.57	0.74	2.38	8.87	51.48	0.22	0.37	0.53	832.40
19	2.00	0.00	4.52	0.68	0.55	0.86	2.46	8.38	51.07	0.19	0.52	0.86	866.00
20	2.00	0.00	3.95	0.72	0.54	0.84	2.81	8.35	53.34	0.18	0.36	1.01	899.60
21	2.00	0.00	4.05	0.79	0.55	0.86	2.72	9.00	52.73	0.18	0.42	1.02	933.20
22	2.00	0.00	4.06	0.85	0.53	0.85	2.83	8.27	56.01	0.17	0.32	0.98	966.80
23	2.00	0.00	3.53	0.87	0.52	0.86	2.88	8.92	53.19	0.22	0.05	1.01	1000.40
24	2.00	0.00	3.38	0.85	0.57	0.84	3.40	7.70	48.70	0.19	0.27	1.01	1034.00
25	2.00	0.00	3.34	0.81	0.53	0.83	3.04	9.25	52.17	0.21	0.05	1.01	1067.60
26	2.00	0.00	4.14	0.64	0.56	0.87	3.34	8.31	52.11	0.18	0.18	1.02	1101.20
27	2.00	0.00	3.25	0.81	0.58	0.83	3.04	7.12	45.23	0.23	0.23	1.00	1134.80
28	2.00	0.00	3.90	0.80	0.57	0.80	2.99	7.62	54.65	0.18	0.25	1.02	1168.40
29	2.00	0.00	2.89	0.82	0.59	0.82	4.04	9.19	44.54	0.18	0.31	0.99	1202.00
30	2.00	0.00	3.20	0.90	0.58	0.84	3.37	8.61	46.20	0.19	0.41	1.01	1235.60
31	2.00	0.00	3.19	0.63	0.61	0.72	3.59	7.82	42.38	0.21	0.23	1.00	1269.20
32	2.00	0.00	3.44	0.68	0.60	0.76	3.42	9.33	48.37	0.18	0.39	0.99	1302.80
33	2.00	0.00	2.93	0.76	0.57	0.76	3.79	8.41	45.12	0.16	0.65	1.01	1336.40
34	2.00	0.00	3.63	0.70	0.60	0.75	3.18	8.10	48.52	0.18	0.44	1.01	1370.00
35	2.00	0.00	3.42	0.67	0.60	0.69	3.47	8.81	47.13	0.21	0.11	1.01	1403.60
36	2.00	0.00	3.49	0.77	0.58	0.86	3.41	8.60	44.93	0.19	0.50	1.00	1437.20
37	2.00	0.00	3.60	0.69	0.59	0.82	3.10	8.38	41.37	0.24	0.33	0.99	1470.80
38	2.00	0.00	4.59	0.77	0.58	0.70	2.12	7.73	63.75	0.13	0.37	0.75	1504.40
39	2.00	0.00	3.99	0.78	0.58	0.83	2.76	9.02	52.56	0.16	0.57	0.20	1538.00

SUMMARY DATA

SUBJECT: C DATE: 240572 RUN: C2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	QZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.10	0.70	0.77	0.59	3.39	9.25	40.30	0.21	0.58	0.21	257.48
2	1.37	0.00	3.94	0.50	0.78	0.56	3.48	8.63	37.74	0.20	0.74	0.20	291.08
3	2.00	0.00	5.42	0.64	0.76	0.61	2.85	7.48	40.23	0.22	0.69	0.20	324.68
4	2.00	0.00	3.87	0.50	0.72	0.58	3.49	8.09	44.79	0.16	0.80	0.20	358.28
5	2.00	0.00	3.21	0.55	0.73	0.53	3.39	8.33	39.96	0.22	0.41	0.21	391.88
6	2.00	0.00	5.03	0.61	0.85	0.49	3.11	6.92	40.99	0.20	0.70	0.21	425.48
7	2.00	0.00	3.46	0.59	0.68	0.57	2.69	7.50	55.28	0.14	0.58	0.73	459.08
8	2.00	0.00	3.54	0.58	0.83	0.43	3.10	8.74	39.01	0.23	0.54	1.71	492.68
9	2.00	0.00	3.51	0.66	0.80	0.47	3.17	8.17	42.94	0.20	0.64	1.87	526.28
10	2.00	0.00	3.74	0.57	0.80	0.47	3.65	8.71	41.95	0.20	0.39	1.87	559.88
11	2.00	0.00	3.43	0.65	0.71	0.51	2.86	7.72	48.80	0.21	0.31	1.87	593.48
12	2.00	0.00	3.86	0.74	0.79	0.56	3.37	7.98	44.46	0.17	0.76	1.86	627.08
13	2.00	0.00	3.62	0.69	0.76	0.52	3.33	7.69	45.85	0.18	0.57	1.87	660.68
14	2.00	0.00	3.17	0.65	0.70	0.53	2.78	8.27	46.24	0.22	0.38	1.90	694.28
15	2.00	0.00	4.73	0.51	0.98	0.40	3.27	9.62	35.61	0.21	0.83	1.87	727.88
16	2.00	0.00	3.43	0.49	0.72	0.43	2.73	4.48	49.54	0.22	0.27	1.86	761.48
17	2.00	0.00	5.21	0.34	0.75	0.48	2.49	7.72	56.89	0.14	0.58	1.87	795.08
18	2.00	0.00	5.84	0.55	0.63	0.51	1.81	6.62	56.98	0.32	-0.01	1.87	828.68
19	2.00	0.00	8.93	0.49	0.61	0.41	1.07	10.32	74.69	0.03	0.26	0.94	862.28
20	2.00	0.00	4.99	0.68	0.60	0.70	2.48	7.75	60.32	0.10	0.70	0.87	895.88
21	2.00	0.00	4.18	0.67	0.66	0.68	2.90	7.48	50.93	0.16	0.66	1.00	929.48
22	2.00	0.00	3.98	0.76	0.67	0.75	2.67	7.03	34.11	0.24	0.89	1.01	963.08
23	2.00	0.00	3.94	0.71	0.58	0.78	2.90	8.77	47.90	0.19	0.52	1.00	996.68
24	2.00	0.00	4.89	0.60	0.63	0.69	2.85	8.84	52.51	0.17	0.51	1.00	1030.28
25	2.00	0.00	3.82	0.81	0.64	0.76	3.87	9.06	43.65	0.25	0.34	0.98	1063.88
26	2.00	0.00	4.26	0.55	0.65	0.62	2.96	7.61	65.40	0.08	0.60	1.02	1097.48
27	2.00	0.00	3.57	0.68	0.73	0.63	3.51	9.26	35.00	0.24	0.45	1.00	1131.08
28	2.00	0.00	3.84	0.54	0.73	0.56	2.91	6.27	50.25	0.11	1.09	0.99	1164.68
29	2.00	0.00	4.13	0.65	0.73	0.56	3.04	8.21	44.24	0.21	0.51	1.01	1198.28
30	2.00	0.00	3.07	0.73	0.66	0.73	3.34	7.38	43.44	0.18	0.66	1.00	1231.88
31	2.00	0.00	4.23	0.64	0.65	0.69	2.73	8.00	44.88	0.21	0.56	1.01	1265.48
32	2.00	0.00	3.39	0.69	0.68	0.66	3.10	7.38	41.33	0.19	0.77	1.01	1299.08
33	2.00	0.00	3.81	0.71	0.72	0.71	3.44	8.24	35.37	0.24	0.49	1.01	1332.68
34	2.00	0.00	3.18	0.74	0.66	0.67	3.19	7.68	41.62	0.23	0.34	0.99	1366.28
35	2.00	0.00	3.86	0.75	0.64	0.72	3.04	7.36	42.57	0.24	0.32	1.00	1399.88
36	2.00	0.00	3.97	0.75	0.63	0.75	2.95	7.63	48.85	0.17	0.60	1.00	1433.48
37	2.00	0.00	4.02	0.81	0.54	0.79	2.39	7.47	58.64	0.15	0.44	1.01	1467.08
38	2.00	0.00	3.75	0.72	0.57	0.80	2.90	6.48	48.74	0.20	0.37	1.01	1500.68
39	2.00	0.00	4.83	0.77	0.58	0.78	2.28	7.56	56.10	0.18	0.44	0.75	1534.28
40	2.00	0.00	3.35	0.65	0.61	0.73	3.00	7.38	42.88	0.25	0.25	0.21	1567.88

********** SUMMARY DATA **********

SUBJECT: D DATE: 240572 RUN: D2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.48	0.80	0.57	0.85	2.88	7.87	46.99	0.20	0.49	0.20	330.00
2	1.02	0.00	3.62	0.76	0.65	0.75	3.61	8.27	42.18	0.20	0.41	0.20	363.60
3	2.00	0.00	3.62	0.70	0.57	0.74	2.76	8.23	50.37	0.23	0.16	0.21	397.20
4	2.00	0.00	3.99	0.74	0.64	0.67	2.73	7.31	51.17	0.19	0.42	0.20	430.80
5	2.00	0.00	3.10	0.74	0.76	0.54	3.29	7.66	44.83	0.22	0.21	0.92	464.40
6	2.00	0.00	3.05	0.70	0.75	0.54	3.66	7.80	41.98	0.22	0.15	1.93	498.00
7	2.00	0.00	3.15	0.73	0.74	0.51	3.16	7.43	45.83	0.20	0.40	2.93	531.60
8	2.00	0.00	2.85	0.71	0.75	0.49	3.42	7.65	46.14	0.19	0.39	2.92	565.20
9	2.00	0.00	3.37	0.75	0.76	0.55	3.39	7.63	39.15	0.23	0.36	2.93	598.80
10	2.00	0.00	3.08	0.80	0.73	0.53	3.45	6.83	46.38	0.20	0.24	2.97	632.40
11	2.00	0.00	3.61	0.79	0.76	0.53	3.42	6.03	39.01	0.25	0.15	2.93	666.00
12	2.00	0.00	3.30	0.78	0.77	0.56	3.29	7.37	39.69	0.24	0.25	2.91	699.60
13	2.00	0.00	3.28	0.77	0.75	0.55	3.31	7.18	46.42	0.17	0.61	2.92	733.20
14	2.00	0.00	3.48	0.77	0.82	0.49	3.04	6.98	40.60	0.25	0.34	2.50	766.80
15	2.00	0.00	3.46	0.79	0.72	0.60	3.08	7.07	39.84	0.24	0.43	1.50	800.40
16	2.00	0.00	3.72	0.70	0.65	0.67	2.79	8.84	49.41	0.18	0.57	0.49	834.00
17	2.00	0.00	4.67	0.74	0.65	0.77	2.74	7.28	41.79	0.23	0.55	0.90	867.60
18	2.00	0.00	5.72	0.58	0.67	0.68	2.80	8.23	48.62	0.16	0.74	1.00	901.20
19	2.00	0.00	3.55	0.84	0.59	0.90	3.09	8.97	42.27	0.20	0.66	1.01	934.80
20	2.00	0.00	5.24	0.82	0.60	0.75	2.30	7.68	49.46	0.23	0.43	1.00	968.40
21	2.00	0.00	3.64	0.87	0.57	0.89	2.70	7.15	44.50	0.23	0.49	1.00	1002.00
22	2.00	0.00	3.53	0.87	0.56	0.90	2.96	7.60	45.21	0.22	0.36	1.02	1035.60
23	2.00	0.00	3.75	0.90	0.58	0.88	2.95	7.91	44.34	0.21	0.55	1.01	1069.20
24	2.00	0.00	3.64	0.79	0.56	0.78	2.69	6.26	53.53	0.19	0.34	1.02	1102.80
25	2.00	0.00	3.34	0.68	0.58	0.78	3.30	7.58	44.75	0.24	0.02	1.01	1136.40
26	2.00	0.00	3.06	0.88	0.60	0.87	3.42	8.01	38.22	0.22	0.51	1.00	1170.00
27	2.00	0.00	3.62	0.74	0.60	0.80	3.11	7.65	42.94	0.24	0.20	1.00	1203.60
28	2.00	0.00	4.33	0.84	0.57	0.81	2.38	7.24	51.16	0.24	0.24	0.99	1237.20
29	2.00	0.00	3.99	0.84	0.61	0.82	2.69	8.50	44.11	0.21	0.61	1.02	1270.80
30	2.00	0.00	3.92	0.87	0.57	0.88	2.81	6.29	44.42	0.23	0.40	1.00	1304.40
31	2.00	0.00	3.69	0.83	0.57	0.87	2.72	7.35	45.22	0.24	0.36	1.01	1338.00
32	2.00	0.00	3.69	0.74	0.60	0.83	3.19	7.88	43.83	0.19	0.60	0.99	1371.60
33	2.00	0.00	4.40	0.79	0.53	0.89	2.49	7.47	51.93	0.20	0.44	1.00	1405.20
34	2.00	0.00	4.78	0.60	0.63	0.73	2.74	5.71	46.22	0.21	0.55	1.01	1438.80
35	2.00	0.00	4.25	0.82	0.57	0.80	2.48	7.07	52.53	0.20	0.39	1.02	1472.40
36	2.00	0.00	4.14	0.82	0.59	0.80	2.57	6.68	47.28	0.20	0.62	0.74	1506.00
37	2.00	0.00	3.42	0.78	0.61	0.79	3.19	8.86	43.27	0.21	0.50	0.20	1539.60
38	2.00	0.00	4.32	0.87	0.53	0.89	2.46	7.59	51.74	0.21	0.39	0.20	1573.20
39	2.00	0.00	4.37	0.83	0.56	0.82	2.50	7.57	51.64	0.19	0.46	0.21	1606.80

********** SUMMARY DATA **********

SUBJECT: E DATE: 250572 RUN: #2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.61	0.70	0.67	0.78	3.60	8.04	33.47	0.24	0.50	0.22	262.16
2	1.21	0.00	3.38	0.60	0.63	0.76	3.46	7.98	45.89	0.16	0.74	0.21	295.76
3	2.00	0.00	5.73	0.62	0.59	0.73	2.28	6.79	48.17	0.22	0.49	0.22	329.36
4	2.00	0.00	4.10	0.66	0.64	0.77	2.94	8.11	47.04	0.14	0.95	0.22	362.96
5	2.00	0.00	4.99	0.68	0.58	0.78	2.43	7.96	50.62	0.23	0.33	0.20	396.56
6	2.00	0.00	6.11	0.72	0.53	0.82	1.87	8.06	54.70	0.20	0.47	0.20	430.16
7	2.00	0.00	5.78	0.73	0.60	0.60	2.08	6.90	61.83	0.22	0.07	0.86	463.76
8	2.00	0.00	5.51	0.63	0.76	0.50	2.85	8.21	56.29	0.11	0.82	1.86	497.36
9	2.00	0.00	4.65	0.80	0.75	0.51	2.45	7.45	52.08	0.17	0.57	1.87	530.96
10	2.00	0.00	3.72	0.52	0.82	0.41	3.27	6.51	53.65	0.13	0.66	1.87	564.56
11	2.00	0.00	4.96	0.56	0.79	0.44	2.28	7.69	52.07	0.17	0.62	1.90	598.16
12	2.00	0.00	4.34	0.67	0.78	0.46	2.74	7.94	46.96	0.20	0.56	1.87	631.76
13	2.00	0.00	4.48	0.79	0.78	0.52	3.05	7.23	39.29	0.26	0.28	1.87	665.36
14	2.00	0.00	4.26	0.62	0.81	0.43	2.99	6.29	47.07	0.20	0.48	1.87	698.96
15	2.00	0.00	4.93	0.65	0.85	0.47	3.32	6.80	41.58	0.22	0.40	1.86	732.56
16	2.00	0.00	4.35	0.63	0.87	0.46	3.07	6.93	36.72	0.26	0.40	1.87	766.16
17	2.00	0.00	3.63	0.77	0.78	0.49	2.92	6.49	39.60	0.23	0.57	1.87	799.76
18	2.00	0.00	5.36	0.73	0.74	0.60	2.46	6.31	50.14	0.13	0.93	1.77	833.36
19	2.00	0.00	6.32	0.60	0.72	0.66	2.22	7.57	41.74	0.22	0.80	0.79	866.96
20	2.00	0.00	4.22	0.56	0.66	0.65	2.94	7.46	45.05	0.24	0.20	0.96	900.56
21	2.00	0.00	3.55	0.69	0.63	0.77	3.27	8.39	42.84	0.22	0.29	1.01	934.16
22	2.00	0.00	4.14	0.76	0.66	0.77	2.95	7.90	39.49	0.22	0.67	1.00	967.76
23	2.00	0.00	3.54	0.78	0.68	0.76	3.71	8.66	32.68	0.24	0.34	1.01	1001.36
24	2.00	0.00	3.88	0.79	0.66	0.76	3.33	8.14	38.68	0.24	0.37	1.00	1034.96
25	2.00	0.00	3.10	0.71	0.68	0.75	4.02	7.36	35.97	0.21	0.33	1.01	1068.56
26	2.00	0.00	3.49	0.69	0.70	0.73	3.58	7.63	33.16	0.24	0.46	1.00	1102.16
27	2.00	0.00	3.84	0.70	0.71	0.67	3.45	7.86	38.43	0.22	0.43	1.02	1135.76
28	2.00	0.00	4.20	0.71	0.63	0.72	3.08	7.83	42.30	0.30	-0.28	1.01	1169.36
29	2.00	0.00	3.75	0.77	0.63	0.83	3.38	7.63	37.76	0.23	0.42	1.01	1202.96
30	2.00	0.00	3.57	0.71	0.57	0.82	3.04	7.97	50.25	0.18	0.39	1.00	1236.56
31	2.00	0.00	3.95	0.78	0.63	0.81	3.26	8.13	38.52	0.22	0.64	1.01	1270.16
32	2.00	0.00	3.65	0.79	0.56	0.83	3.01	7.25	49.56	0.20	0.30	1.00	1303.76
33	2.00	0.00	4.43	0.59	0.61	0.69	2.74	7.50	47.56	0.21	0.43	1.01	1337.36
34	2.00	0.00	3.74	0.62	0.62	0.73	3.23	7.60	50.58	0.17	0.44	1.01	1370.96
35	2.00	0.00	3.89	0.73	0.60	0.82	2.82	8.47	42.65	0.24	0.43	1.02	1404.56
36	2.00	0.00	4.07	0.65	0.61	0.83	3.15	7.45	42.94	0.23	0.35	1.00	1438.16
37	2.00	0.00	4.42	0.66	0.57	0.74	2.63	8.19	51.58	0.22	0.27	1.02	1471.76
38	2.00	0.00	5.26	0.72	0.61	0.84	2.35	5.83	42.87	0.22	0.70	1.02	1505.36
39	2.00	0.00	5.90	0.72	0.56	0.73	1.77	7.98	53.59	0.25	0.35	0.67	1538.96
40	2.00	0.00	3.64	0.74	0.60	0.83	3.19	7.55	43.09	0.20	0.54	0.22	1572.56

********** SUMMARY DATA **********

SUBJECT: F DATE: 250572 RUN: F2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	5.65	0.64	0.64	0.74	2.32	6.51	46.61	0.22	0.57	0.20	322.22
2	1.42	0.00	6.37	0.45	0.60	0.60	2.65	6.27	56.67	0.25	-0.21	0.22	355.82
3	2.00	0.00	7.37	0.74	0.53	0.63	1.18	5.75	65.80	0.20	0.21	0.23	389.42
4	2.00	0.00	7.28	0.57	0.52	0.77	1.68	5.61	63.71	0.19	0.24	0.21	423.02
5	2.00	0.00	6.96	0.57	0.60	0.58	1.56	6.08	65.30	0.29	-0.04	0.67	456.62
6	2.00	0.00	6.60	0.67	0.74	0.36	1.66	6.69	59.98	0.28	0.11	1.68	490.22
7	2.00	0.00	5.95	0.57	0.80	0.37	1.58	6.44	72.72	-0.37	1.39	2.70	523.82
8	2.00	0.00	5.89	0.42	0.84	0.22	1.66	3.60	61.91	0.48	-0.50	2.94	557.42
9	2.00	0.00	10.65	0.36	1.03	0.11	0.61	9.09	115.56	-0.30	-0.16	2.91	591.02
10	2.00	0.00	14.62	0.19	1.27	0.12	1.03	5.47	46.00	-1.23	2.08	2.92	624.62
11	2.00	0.00	6.85	0.34	0.98	0.27	2.94	7.14	48.82	0.22	0.24	2.93	658.22
12	2.00	0.00	7.13	0.28	0.99	0.24	2.48	9.62	58.35	0.20	0.16	2.92	691.82
13	2.00	0.00	6.97	0.32	1.23	0.23	2.89	8.18	44.23	0.16	0.99	2.93	725.42
14	2.00	0.00	7.68	0.37	1.12	0.13	2.13	8.82	73.26	0.05	0.39	2.70	759.02
15	2.00	0.00	6.66	0.55	0.75	0.42	2.13	8.17	50.15	0.28	0.23	1.74	792.62
16	2.00	0.00	7.46	0.45	0.87	0.27	1.24	9.67	78.45	0.87	-1.09	0.72	826.22
17	2.00	0.00	4.42	0.49	0.77	0.50	3.30	6.94	46.64	0.17	0.68	0.79	859.82
18	2.00	0.00	4.00	0.46	0.67	0.65	3.06	7.13	49.04	0.19	0.42	0.99	893.42
19	2.00	0.00	4.58	0.77	0.59	0.85	2.66	6.71	42.60	0.25	0.42	1.02	927.02
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	960.62
21	0.58	0.00	5.12	0.68	0.58	0.78	2.46	6.95	50.23	0.20	0.48	1.01	989.92
22	1.85	0.00	5.10	0.60	0.61	0.59	2.15	5.81	62.64	0.23	-0.05	1.02	1023.52
23	2.00	0.00	5.31	0.74	0.54	0.68	1.74	8.05	63.39	0.27	-0.01	1.02	1057.12
24	2.00	0.00	6.34	0.67	0.61	0.64	2.38	7.20	64.94	0.06	0.70	1.01	1090.72
25	2.00	0.00	6.35	0.65	0.62	0.65	2.10	8.89	52.85	0.18	0.58	1.03	1124.32
26	2.00	0.00	6.25	0.66	0.55	0.69	1.83	6.77	52.44	0.24	0.41	1.01	1157.92
27	2.00	0.00	6.36	0.50	0.68	0.54	2.12	8.10	58.04	0.19	0.32	1.01	1191.52
28	2.00	0.00	5.99	0.72	0.66	0.67	2.86	5.12	51.02	0.16	0.66	1.02	1225.12
29	2.00	0.00	5.29	0.42	0.65	0.54	2.25	6.41	52.30	0.24	0.25	1.01	1258.72
30	2.00	0.00	5.13	0.59	0.63	0.54	1.92	6.41	60.41	0.20	0.26	1.02	1292.32
31	2.00	0.00	6.10	0.52	0.67	0.46	2.22	7.18	58.52	0.28	-0.17	1.02	1325.92
32	2.00	0.00	6.04	0.66	0.57	0.74	1.88	6.11	57.06	0.20	0.39	1.01	1359.52
33	2.00	0.00	5.75	0.65	0.83	0.51	2.97	6.61	43.61	0.22	0.45	1.01	1393.12
34	2.00	0.00	7.81	0.41	0.61	0.70	2.14	7.80	57.41	0.25	0.07	1.02	1426.72
35	2.00	0.00	6.35	0.83	0.54	0.74	1.74	6.04	58.45	0.22	0.30	1.01	1460.32
36	2.00	0.00	6.97	0.63	0.55	0.67	1.91	6.39	65.92	0.21	0.04	0.93	1493.92
37	2.00	0.00	5.24	0.53	0.63	0.72	2.48	7.14	58.07	0.10	0.77	0.28	1527.52
38	2.00	0.00	6.69	0.64	0.51	0.66	1.55	6.35	63.43	0.20	0.24	0.20	1561.12
39	2.00	0.00	8.23	0.79	0.64	0.58	1.23	7.55	51.79	0.41	0.19	0.23	1594.72

********** SUMMARY DATA **********

SUBJECT: G DATE: 250572 RUN: G2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.68	0.92	0.50	0.89	2.53	8.57	53.19	0.25	0.04	0.22	270.48
2	1.24	0.00	3.56	0.88	0.59	0.88	2.96	7.54	43.39	0.22	0.49	0.20	304.08
3	2.00	0.00	3.31	0.78	0.58	0.85	3.03	8.39	45.95	0.19	0.62	0.21	337.68
4	2.00	0.00	4.63	0.65	0.63	0.79	3.12	6.66	42.47	0.21	0.51	0.20	371.28
5	2.00	0.00	3.53	0.83	0.60	0.83	3.30	8.26	44.72	0.19	0.49	0.21	404.88
6	2.00	0.00	3.68	0.61	0.75	0.62	3.13	7.21	37.23	0.24	0.57	0.32	438.48
7	2.00	0.00	3.83	0.72	0.69	0.64	3.44	7.42	43.73	0.20	0.46	1.11	472.08
8	2.00	0.00	3.03	0.75	0.66	0.70	3.71	8.70	42.37	0.19	0.45	1.87	505.68
9	2.00	0.00	3.02	0.66	0.65	0.63	3.48	7.78	50.48	0.18	0.22	1.87	539.28
10	2.00	0.00	2.86	0.75	0.67	0.70	3.83	7.07	39.91	0.22	0.09	1.87	572.88
11	2.00	0.00	2.93	0.84	0.66	0.72	3.45	8.25	37.27	0.24	0.34	1.87	606.48
12	2.00	0.00	3.22	0.76	0.66	0.67	3.01	8.15	50.39	0.18	0.43	1.87	640.08
13	2.00	0.00	2.95	0.82	0.65	0.69	3.39	8.52	41.63	0.23	0.26	1.87	673.68
14	2.00	0.00	3.98	0.58	0.73	0.56	3.31	7.66	49.72	0.18	0.40	1.87	707.28
15	2.00	0.00	3.40	0.70	0.71	0.67	3.28	8.11	41.58	0.21	0.57	1.87	740.88
16	2.00	0.00	3.11	0.65	0.73	0.65	4.00	7.83	36.73	0.16	1.23	1.87	774.48
17	2.00	0.00	3.03	0.62	0.67	0.64	3.52	8.11	40.84	0.25	-0.08	1.87	808.08
18	2.00	0.00	3.75	0.58	0.72	0.59	3.50	7.42	43.87	0.18	0.66	1.54	841.68
19	2.00	0.00	3.51	0.63	0.67	0.75	3.39	7.93	36.35	0.22	0.70	0.55	875.28
20	2.00	0.00	3.33	0.73	0.61	0.81	3.07	7.89	43.78	0.20	0.56	1.02	908.88
21	2.00	0.00	3.35	0.83	0.58	0.87	3.11	8.51	44.51	0.22	0.36	1.00	942.48
22	2.00	0.00	3.24	0.85	0.58	0.91	3.17	9.27	43.12	0.20	0.61	1.02	976.08
23	2.00	0.00	3.14	0.84	0.59	0.85	3.18	8.85	42.24	0.22	0.45	1.01	1009.68
24	2.00	0.00	3.14	0.79	0.55	0.86	3.12	8.37	46.45	0.21	0.37	1.02	1043.28
25	2.00	0.00	3.60	0.78	0.58	0.81	3.00	8.02	46.64	0.20	0.47	1.01	1076.88
26	2.00	0.00	3.29	0.82	0.55	0.91	3.09	8.29	47.97	0.18	0.52	1.01	1110.48
27	2.00	0.00	4.02	0.76	0.58	0.82	2.63	7.67	47.76	0.19	0.61	1.01	1144.08
28	2.00	0.00	3.59	0.82	0.59	0.87	3.18	8.85	43.76	0.20	0.56	1.00	1177.68
29	2.00	0.00	3.79	0.79	0.56	0.86	2.80	8.22	45.71	0.23	0.37	1.01	1211.28
30	2.00	0.00	3.68	0.87	0.56	0.90	2.74	8.43	46.46	0.21	0.50	1.01	1244.88
31	2.00	0.00	3.33	0.83	0.56	0.87	2.90	7.79	48.63	0.20	0.44	1.01	1278.48
32	2.00	0.00	3.04	0.86	0.57	0.90	3.35	7.93	43.73	0.21	0.36	1.02	1312.08
33	2.00	0.00	3.04	0.73	0.54	0.89	3.08	8.04	51.08	0.18	0.37	1.02	1345.68
34	2.00	0.00	3.09	0.76	0.57	0.84	3.22	8.23	45.53	0.22	0.23	1.00	1379.28
35	2.00	0.00	3.74	0.73	0.61	0.82	3.00	8.35	47.34	0.16	0.79	1.02	1412.88
36	2.00	0.00	3.56	0.77	0.57	0.83	3.14	7.32	45.10	0.22	0.27	1.00	1446.48
37	2.00	0.00	3.29	0.82	0.59	0.81	3.19	7.96	44.87	0.21	0.40	1.01	1480.08
38	2.00	0.00	4.36	0.63	0.70	0.70	3.20	8.17	38.58	0.23	0.49	0.98	1513.68
39	2.00	0.00	3.05	0.53	0.68	0.74	4.20	8.42	33.01	0.13	1.97	0.50	1547.28
40	2.00	0.00	3.56	0.79	0.57	0.89	3.09	9.04	43.59	0.23	0.36	0.20	1580.88

********** SUMMARY DATA **********

SUBJECT: H DATE: 250572 RUN: H2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.75	0.71	0.60	0.71	3.27	9.54	55.21	0.15	0.37	0.21	288.36
2	1.55	0.00	3.04	0.78	0.66	0.67	3.78	9.64	48.48	0.21	-0.24	0.20	321.96
3	2.00	0.00	2.68	0.76	0.72	0.67	4.33	9.60	37.29	0.15	1.13	0.22	355.56
4	2.00	0.00	3.40	0.73	0.65	0.71	3.39	8.69	46.08	0.20	0.36	0.21	389.16
5	2.00	0.00	3.96	0.70	0.78	0.54	3.62	7.73	39.88	0.22	0.34	0.21	422.76
6	2.00	0.00	3.79	0.62	0.88	0.39	4.23	7.57	38.21	0.17	0.75	0.67	456.36
7	2.00	0.00	2.88	0.57	0.78	0.56	4.03	7.79	44.24	0.23	-0.43	1.68	489.96
8	2.00	0.00	3.07	0.54	0.88	0.53	3.73	8.61	36.03	0.25	-0.03	2.70	523.56
9	2.00	0.00	3.05	0.56	0.89	0.45	3.73	9.81	40.01	0.24	-0.03	2.92	557.16
10	2.00	0.00	3.38	0.61	0.85	0.48	3.57	10.00	39.82	0.19	0.70	2.91	590.76
11	2.00	0.00	3.27	0.58	0.90	0.42	4.18	8.72	39.52	0.16	0.97	2.93	624.36
12	2.00	0.00	2.99	0.58	0.86	0.44	3.96	7.38	42.57	0.23	-0.34	2.92	657.96
13	2.00	0.00	3.06	0.47	0.87	0.37	4.08	8.46	44.02	0.13	1.07	2.91	691.56
14	2.00	0.00	3.82	0.60	0.85	0.47	3.53	8.86	36.80	0.24	0.30	2.93	725.16
15	2.00	0.00	4.10	0.49	0.94	0.33	4.78	7.98	35.78	0.20	0.05	2.74	758.76
16	2.00	0.00	3.27	0.54	0.85	0.47	3.67	7.99	44.47	0.18	0.45	1.73	792.36
17	2.00	0.00	3.68	0.63	0.72	0.61	3.44	9.20	46.80	0.17	0.59	0.72	825.96
18	2.00	0.00	3.11	0.62	0.78	0.56	3.73	8.16	37.20	0.19	0.82	0.78	859.56
19	2.00	0.00	3.51	0.75	0.68	0.67	3.37	8.27	45.27	0.20	0.41	1.02	893.16
20	2.00	0.00	2.65	0.78	0.65	0.73	3.81	8.98	46.63	0.18	0.29	1.00	926.76
21	2.00	0.00	3.46	0.79	0.66	0.73	3.34	7.39	42.03	0.23	0.23	1.01	960.36
22	2.00	0.00	2.99	0.80	0.67	0.72	3.37	7.90	39.73	0.24	0.20	1.01	993.96
23	2.00	0.00	2.92	0.76	0.67	0.67	3.65	8.60	47.66	0.17	0.44	1.02	1027.56
24	2.00	0.00	3.25	0.73	0.74	0.66	4.17	8.22	32.06	0.18	1.10	1.00	1061.16
25	2.00	0.00	3.27	0.73	0.74	0.63	4.17	9.03	37.03	0.15	1.31	1.02	1094.76
26	2.00	0.00	3.22	0.68	0.69	0.59	3.23	9.12	50.45	0.15	0.71	1.02	1128.36
27	2.00	0.00	3.19	0.73	0.74	0.63	3.84	8.86	40.89	0.18	0.66	1.01	1161.96
28	2.00	0.00	3.32	0.67	0.77	0.58	3.39	7.75	38.12	0.26	0.11	1.01	1195.56
29	2.00	0.00	4.05	0.79	0.76	0.59	3.25	9.42	36.20	0.27	0.18	1.01	1229.16
30	2.00	0.00	3.05	0.66	0.72	0.61	3.82	7.98	37.97	0.19	0.66	1.01	1262.76
31	2.00	0.00	4.01	0.68	0.84	0.46	3.22	8.78	44.24	0.20	0.49	1.01	1296.36
32	2.00	0.00	3.06	0.64	0.76	0.59	3.98	8.82	39.89	0.16	0.90	1.01	1329.96
33	2.00	0.00	3.27	0.58	0.83	0.50	3.82	7.28	35.88	0.21	0.56	1.01	1363.56
34	2.00	0.00	3.41	0.65	0.89	0.50	3.84	7.54	28.87	0.18	1.47	1.02	1397.16
35	2.00	0.00	3.40	0.61	0.86	0.49	3.55	8.64	34.16	0.22	0.68	1.01	1430.76
36	2.00	0.00	3.41	0.71	0.75	0.55	3.27	7.64	46.93	0.18	0.54	1.02	1464.36
37	2.00	0.00	3.99	0.67	0.74	0.57	2.90	7.87	43.65	0.23	0.41	0.86	1497.96
38	2.00	0.00	3.86	0.66	0.79	0.61	3.39	8.28	39.02	0.22	0.46	0.21	1531.56
39	2.00	0.00	2.62	0.70	0.78	0.64	4.63	8.29	28.26	0.16	1.49	0.22	1565.16

********** SUMMARY DATA **********

SUBJECT: I DATE: 250572 RUN: I2 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PMARH DEG	TAUH SEC	ALPHA R/S	GZ (G)	TIME SEC
1	0.50	0.00	2.35	0.80	0.62	0.85	4.55	9.59	35.52	0.14	1.39		282.58
2	0.66	0.00	2.31	0.84	0.65	0.85	5.18	9.40	31.52	0.16	0.97		316.18
3	1.91	0.00	2.23	0.77	0.59	0.86	4.46	8.98	38.09	0.19	0.35		349.78
4	2.00	0.00	2.51	0.88	0.62	0.88	4.36	9.50	34.88	0.16	1.23		383.38
5	2.00	0.00	2.38	0.83	0.64	0.81	4.83	8.96	33.39	0.17	0.70		416.98
6	2.00	0.00	2.39	0.79	0.62	0.86	4.55	8.94	35.24	0.13	1.59		450.58
7	2.00	0.00	2.56	0.82	0.62	0.84	3.79	8.45	41.80	0.18	0.55		484.18
8	2.00	0.00	2.52	0.87	0.63	0.86	4.40	8.95	35.38	0.16	1.07		517.78
9	2.00	0.00	2.69	0.82	0.64	0.84	4.34	8.80	35.72	0.16	1.16		551.38
10	2.00	0.00	2.55	0.81	0.59	0.83	4.03	8.57	42.60	0.15	0.91		584.98
11	2.00	0.00	2.39	0.82	0.63	0.85	4.89	8.62	33.99	0.17	0.79		618.58
12	2.00	0.00	2.57	0.86	0.61	0.85	4.26	9.01	38.65	0.16	0.97		652.18
13	2.00	0.00	2.59	0.78	0.62	0.79	3.95	8.32	41.22	0.18	0.52		685.78
14	2.00	0.00	2.74	0.77	0.59	0.87	4.12	8.62	40.96	0.17	0.57		719.38
15	2.00	0.00	2.44	0.83	0.58	0.87	4.27	8.47	41.01	0.16	0.78		752.98
16	2.00	0.00	2.83	0.88	0.57	0.87	3.99	8.09	41.72	0.19	0.36		786.58
17	2.00	0.00	2.88	0.86	0.58	0.82	3.54	8.46	45.46	0.19	0.34		820.18
18	2.00	0.00	2.85	0.90	0.59	0.89	4.05	8.36	39.78	0.17	0.82		853.78
19	2.00	0.00	2.99	0.79	0.59	0.87	3.68	8.40	38.95	0.22	0.28		887.38
20	2.00	0.00	2.79	0.84	0.57	0.86	3.37	7.96	46.76	0.20	0.32		920.98
21	2.00	0.00	2.94	0.86	0.59	0.89	3.55	7.89	37.31	0.24	0.22		954.58
22	2.00	0.00	2.70	0.85	0.58	0.87	3.63	8.16	42.29	0.20	0.39		988.18
23	2.00	0.00	2.96	0.78	0.60	0.88	3.92	8.10	38.39	0.17	0.89		1021.78
24	2.00	0.00	2.79	0.86	0.59	0.87	4.02	8.27	38.78	0.17	0.78		1055.38
25	2.00	0.00	2.85	0.82	0.58	0.86	3.96	8.86	38.52	0.13	1.53		1088.98
26	2.00	0.00	2.87	0.75	0.61	0.84	4.00	7.88	38.21	0.20	0.49		1122.58
27	2.00	0.00	2.70	0.80	0.61	0.87	4.00	7.35	37.63	0.21	0.24		1156.18
28	2.00	0.00	2.51	0.83	0.61	0.83	4.11	8.39	36.51	0.16	1.10		1189.78
29	2.00	0.00	2.69	0.72	0.65	0.82	4.36	7.80	29.38	0.17	1.36		1223.38
30	2.00	0.00	2.97	0.85	0.63	0.85	3.79	8.20	37.01	0.17	1.09		1256.98
31	2.00	0.00	2.95	0.82	0.63	0.83	3.60	7.89	39.79	0.20	0.56		1290.58
32	2.00	0.00	2.89	0.85	0.62	0.83	3.80	7.65	41.22	0.20	0.39		1324.18
33	2.00	0.00	2.84	0.78	0.63	0.82	4.30	7.68	34.41	0.20	0.42		1357.78
34	2.00	0.00	3.25	0.76	0.60	0.83	3.21	7.90	47.04	0.18	0.52		1391.38
35	2.00	0.00	2.72	0.80	0.64	0.86	4.02	7.81	33.77	0.18	0.98		1424.98
36	2.00	0.00	3.34	0.80	0.61	0.84	3.55	8.65	38.74	0.23	0.34		1458.58
37	2.00	0.00	3.89	0.79	0.61	0.88	3.15	7.31	42.45	0.20	0.66		1492.18
38	2.00	0.00	2.81	0.83	0.63	0.85	3.62	7.73	35.14	0.23	0.49		1525.78
39	2.00	0.00	2.67	0.73	0.59	0.87	3.84	7.84	38.46	0.18	0.85		1559.38

SGB

GZ = 1.00

********** SUMMARY DATA **********

SUBJECT: A DATE: 10672 RUN: A3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/3 NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMAPH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	2.92	0.75	0.62	0.77	3.48	7.63	37.50	0.25	0.16	0.20	264.10
2	0.50	0.00	3.56	0.77	0.63	0.73	2.95	7.12	45.55	0.22	0.41	0.21	297.70
3	1.74	0.00	2.91	0.78	0.62	0.81	3.84	7.46	40.58	0.20	0.30	0.20	331.30
4	2.00	0.00	3.70	0.82	0.59	0.80	2.94	6.78	45.80	0.22	0.40	0.20	364.90
5	2.00	0.00	3.26	0.69	0.65	0.68	3.30	6.89	43.84	0.21	0.42	0.20	398.50
6	2.00	0.00	4.12	0.56	0.73	0.66	3.41	7.52	33.72	0.26	0.38	0.20	432.10
7	2.00	0.00	4.70	0.51	1.13	0.32	2.82	7.44	43.83	0.23	0.43	0.89	465.70
8	2.00	0.00	5.03	0.50	0.98	0.39	3.20	7.44	42.76	0.21	0.50	1.85	499.30
9	2.00	0.00	3.83	0.50	0.84	0.42	3.29	6.95	49.85	0.19	0.21	1.85	532.90
10	2.00	0.00	3.28	0.59	0.84	0.50	4.32	6.71	35.41	0.25	-0.49	1.85	566.50
11	2.00	0.00	3.65	0.48	0.95	0.46	4.34	7.40	30.47	0.19	0.97	1.86	600.10
12	2.00	0.00	3.90	0.64	0.87	0.51	3.29	6.76	35.48	0.25	0.40	1.85	633.70
13	2.00	0.00	3.90	0.57	0.83	0.41	3.20	7.72	39.96	0.29	-0.17	1.85	667.30
14	2.00	0.00	4.07	0.77	0.81	0.51	3.32	7.08	39.54	0.23	0.36	1.87	700.90
15	2.00	0.00	5.91	0.38	0.85	0.42	2.93	6.73	50.08	0.17	0.54	1.86	734.50
16	2.00	0.00	3.69	0.56	0.75	0.54	3.20	6.95	43.25	0.18	0.73	1.87	768.10
17	2.00	0.00	4.74	0.62	0.90	0.42	3.59	6.89	36.88	0.23	0.35	1.84	801.70
18	2.00	0.00	6.25	0.39	0.98	0.33	3.10	9.08	38.68	0.22	0.64	1.70	835.30
19	2.00	0.00	3.99	0.58	0.73	0.57	3.81	6.75	46.09	0.25	-0.75	0.75	868.90
20	2.00	0.00	3.65	0.70	0.60	0.81	3.31	6.91	42.25	0.23	0.29	0.95	902.50
21	2.00	0.00	4.60	0.53	0.65	0.57	2.72	7.78	48.32	0.31	-0.31	0.99	936.10
22	2.00	0.00	3.13	0.77	0.62	0.75	3.21	7.40	43.20	0.23	0.26	0.99	969.70
23	2.00	0.00	4.21	0.59	0.64	0.69	3.39	6.61	43.13	0.24	0.04	0.99	1003.30
24	2.00	0.00	3.19	0.79	0.60	0.80	3.39	7.20	45.64	0.21	0.27	0.98	1036.90
25	2.00	0.00	4.00	0.60	0.69	0.76	3.43	7.67	37.86	0.24	0.28	0.99	1070.50
26	2.00	0.00	3.59	0.79	0.65	0.67	3.25	7.30	44.14	0.22	0.28	0.98	1104.10
27	2.00	0.00	3.65	0.75	0.59	0.76	3.02	7.21	44.72	0.24	0.17	1.00	1137.70
28	2.00	0.00	4.05	0.82	0.64	0.75	3.20	7.23	42.34	0.20	0.61	0.98	1171.30
29	2.00	0.00	3.80	0.62	0.67	0.68	3.05	7.34	45.50	0.19	0.65	0.98	1204.90
30	2.00	0.00	3.77	0.74	0.64	0.75	3.10	7.57	44.05	0.21	0.46	0.98	1238.50
31	2.00	0.00	3.64	0.77	0.64	0.70	3.29	7.00	42.73	0.23	0.23	0.99	1272.10
32	2.00	0.00	3.62	0.64	0.65	0.68	3.23	7.55	42.22	0.23	0.30	0.99	1305.70
33	2.00	0.00	3.73	0.70	0.75	0.65	3.54	7.58	41.74	0.20	0.48	0.99	1339.30
34	2.00	0.00	3.33	0.84	0.67	0.77	3.58	7.39	35.93	0.23	0.39	0.99	1372.90
35	2.00	0.00	4.04	0.58	0.72	0.67	3.42	8.12	34.72	0.23	0.62	0.99	1406.50
36	2.00	0.00	3.43	0.84	0.66	0.76	3.52	7.17	34.89	0.25	0.25	0.99	1440.10
37	2.00	0.00	3.05	0.76	0.64	0.72	3.36	6.94	39.99	0.24	0.21	0.98	1473.70
38	2.00	0.00	3.88	0.62	0.69	0.67	3.41	7.79	42.54	0.18	0.78	0.99	1507.30
39	2.00	0.00	4.26	0.48	0.66	0.64	3.17	7.35	48.91	0.16	0.62	0.62	1540.90
40	2.00	0.00	4.13	0.70	0.61	0.78	2.91	7.13	45.95	0.21	0.47	0.21	1574.50

********** SUMMARY DATA **********

SUBJECT: B DATE: 10672 RUN: B3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.37	0.80	0.54	0.86	3.17	10.14	51.68	0.19	0.19	0.20	275.68
2	0.79	0.00	3.60	0.77	0.54	0.86	3.00	8.48	49.00	0.22	0.14	0.20	309.28
3	1.90	0.00	3.49	0.75	0.52	0.85	2.66	9.38	53.74	0.25	-0.06	0.20	342.88
4	2.00	0.00	3.38	0.83	0.58	0.87	3.04	8.84	44.55	0.20	0.54	0.20	376.48
5	2.00	0.00	3.56	0.83	0.59	0.81	2.77	8.64	45.92	0.21	0.52	0.20	410.08
6	2.00	0.00	3.28	0.73	0.60	0.72	2.73	8.79	45.92	0.23	0.41	0.28	443.68
7	2.00	0.00	3.58	0.80	0.68	0.70	3.32	8.23	40.78	0.20	0.60	1.29	477.28
8	2.00	0.00	3.70	0.76	0.63	0.68	2.59	7.82	47.84	0.19	0.63	2.29	510.88
9	2.00	0.00	3.45	0.70	0.67	0.61	3.21	7.60	46.49	0.18	0.57	2.92	544.48
10	2.00	0.00	3.54	0.77	0.67	0.68	3.69	8.16	36.35	0.25	0.07	2.90	578.08
11	2.00	0.00	3.79	0.79	0.68	0.66	3.14	6.88	45.93	0.18	0.60	2.89	611.68
12	2.00	0.00	3.56	0.71	0.64	0.66	2.85	8.27	45.61	0.23	0.33	2.92	645.28
13	2.00	0.00	4.04	0.74	0.69	0.62	2.96	7.67	47.69	0.18	0.58	2.92	678.88
14	2.00	0.00	4.78	0.75	0.70	0.65	2.96	6.94	41.35	0.25	0.31	2.91	712.48
15	2.00	0.00	3.54	0.82	0.67	0.66	3.00	7.31	40.59	0.27	0.12	2.90	746.08
16	2.00	0.00	3.54	0.70	0.68	0.69	3.30	7.41	38.49	0.24	0.40	2.10	779.68
17	2.00	0.00	4.13	0.74	0.65	0.71	3.05	7.50	39.95	0.24	0.44	1.11	813.28
18	2.00	0.00	3.74	0.76	0.63	0.72	3.12	8.30	45.97	0.21	0.34	0.47	846.88
19	2.00	0.00	3.91	0.80	0.63	0.79	3.21	7.54	43.45	0.21	0.47	1.00	880.48
20	2.00	0.00	3.81	0.87	0.56	0.84	2.75	7.33	48.26	0.21	0.44	1.00	914.08
21	2.00	0.00	3.48	0.74	0.62	0.81	3.44	6.95	38.96	0.23	0.39	1.00	947.68
22	2.00	0.00	4.33	0.85	0.58	0.87	2.80	7.36	48.32	0.19	0.54	1.00	981.28
23	2.00	0.00	3.71	0.75	0.61	0.80	3.27	7.67	44.12	0.19	0.54	1.00	1014.88
24	2.00	0.00	3.20	0.84	0.59	0.85	3.40	7.96	41.39	0.22	0.30	0.99	1048.48
25	2.00	0.00	3.52	0.84	0.59	0.79	3.41	8.10	46.85	0.20	0.24	0.99	1082.08
26	2.00	0.00	3.55	0.75	0.61	0.77	3.15	6.88	46.29	0.20	0.45	1.01	1115.68
27	2.00	0.00	3.54	0.72	0.68	0.72	3.73	8.17	32.76	0.27	-0.09	0.99	1149.28
28	2.00	0.00	3.47	0.74	0.65	0.72	3.43	7.98	41.18	0.21	0.43	1.00	1182.88
29	2.00	0.00	3.22	0.84	0.61	0.84	3.97	7.89	37.84	0.17	0.92	1.00	1216.48
30	2.00	0.00	3.63	0.84	0.61	0.83	3.32	7.63	40.06	0.23	0.36	0.99	1250.08
31	2.00	0.00	3.04	0.72	0.62	0.78	3.70	7.38	40.05	0.23	0.13	0.99	1283.68
32	2.00	0.00	3.46	0.60	0.59	0.75	3.17	7.19	50.79	0.19	0.24	1.00	1317.28
33	2.00	0.00	4.38	0.79	0.64	0.81	2.89	7.65	42.79	0.22	0.52	0.99	1350.88
34	2.00	0.00	4.83	0.75	0.58	0.81	2.78	6.64	47.00	0.22	0.38	1.01	1384.48
35	2.00	0.00	3.18	0.80	0.64	0.84	3.98	7.31	32.75	0.21	0.72	0.99	1418.08
36	2.00	0.00	3.49	0.68	0.61	0.77	3.46	8.19	40.49	0.24	0.11	1.00	1451.68
37	2.00	0.00	4.28	0.75	0.63	0.70	2.93	8.40	46.10	0.23	0.30	0.97	1485.28
38	2.00	0.00	3.77	0.66	0.63	0.69	3.01	8.97	49.16	0.20	0.37	0.47	1518.88
39	2.00	0.00	3.62	0.66	0.65	0.74	3.33	7.51	40.89	0.20	0.67	0.21	1552.48

********** SUMMARY DATA **********

SUBJECT: C DATE: 10672 RUN: C3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RHSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.32	0.72	0.75	0.62	3.83	7.40	31.78	0.19	1.07	0.20	265.48
2	1.28	0.00	3.85	0.60	0.73	0.60	3.18	8.24	39.35	0.23	0.45	0.20	299.08
3	2.00	0.00	5.98	0.59	0.77	0.67	2.36	5.28	28.05	0.29	0.92	0.20	332.68
4	2.00	0.00	5.17	0.54	0.61	0.64	1.93	7.54	54.54	0.16	0.61	0.20	366.28
5	2.00	0.00	5.76	0.50	0.68	0.66	2.69	6.12	46.50	0.18	0.73	0.20	399.88
6	2.00	0.00	6.03	0.67	0.59	0.66	1.81	8.09	53.83	0.31	0.13	0.21	433.48
7	2.00	0.00	6.49	0.69	0.73	0.60	1.94	5.08	53.74	0.06	1.01	0.94	467.08
8	2.00	0.00	4.17	0.67	0.80	0.56	2.98	7.59	40.45	0.20	0.84	1.86	500.68
9	2.00	0.00	3.77	0.65	0.82	0.57	3.38	6.89	35.63	0.23	0.55	1.84	534.28
10	2.00	0.00	4.69	0.61	0.86	0.49	2.89	7.23	33.86	0.27	0.61	1.87	567.88
11	2.00	0.00	5.12	0.41	0.93	0.35	2.51	6.14	49.50	0.27	0.04	1.87	601.48
12	2.00	0.00	4.73	0.57	0.86	0.47	2.84	6.32	40.08	0.21	0.79	1.87	635.08
13	2.00	0.00	4.73	0.57	0.77	0.55	2.81	6.98	34.91	0.27	0.56	1.87	668.68
14	2.00	0.00	4.25	0.55	0.75	0.51	3.12	6.82	43.87	0.20	0.59	1.87	702.28
15	2.00	0.00	4.03	0.58	0.70	0.49	2.20	7.02	57.17	0.13	0.64	1.87	735.88
16	2.00	0.00	3.90	0.65	0.77	0.51	2.88	5.44	39.33	0.24	0.57	1.87	769.48
17	2.00	0.00	3.32	0.67	0.74	0.57	3.24	7.32	46.57	0.17	0.64	1.86	803.08
18	2.00	0.00	6.93	0.58	0.73	0.59	2.11	8.43	47.50	0.22	0.58	1.66	836.68
19	2.00	0.00	6.50	0.64	0.61	0.74	1.96	7.07	57.41	0.11	0.69	0.69	870.28
20	2.00	0.00	4.62	0.68	0.71	0.66	2.84	7.51	39.19	0.26	0.41	0.96	903.88
21	2.00	0.00	3.88	0.84	0.65	0.81	2.82	7.87	39.77	0.23	0.67	1.00	937.48
22	2.00	0.00	4.00	0.51	0.66	0.67	2.93	6.81	42.46	0.19	0.78	0.99	971.08
23	2.00	0.00	3.96	0.72	0.73	0.69	3.00	7.00	34.47	0.25	0.65	1.00	1004.68
24	2.00	0.00	4.68	0.59	0.62	0.75	2.93	6.65	42.31	0.25	0.30	0.99	1038.28
25	2.00	0.00	3.80	0.70	0.63	0.64	2.70	8.06	49.42	0.26	0.05	1.00	1071.88
26	2.00	0.00	3.56	0.73	0.64	0.78	3.35	7.65	44.12	0.19	0.56	0.99	1105.48
27	2.00	0.00	5.22	0.62	0.62	0.68	2.24	7.40	57.25	0.16	0.49	0.99	1139.08
28	2.00	0.00	4.08	0.70	0.69	0.69	2.98	7.76	38.15	0.25	0.49	0.99	1172.68
29	2.00	0.00	3.88	0.63	0.67	0.69	3.02	7.25	40.09	0.24	0.44	0.98	1206.28
30	2.00	0.00	4.21	0.68	0.64	0.74	2.69	7.83	49.42	0.17	0.66	0.99	1239.88
31	2.00	0.00	4.35	0.71	0.58	0.77	2.26	7.15	46.08	0.25	0.44	0.99	1273.48
32	2.00	0.00	5.92	0.49	0.62	0.73	2.48	6.92	48.39	0.26	0.19	1.00	1307.08
33	2.00	0.00	4.04	0.72	0.64	0.70	2.89	7.08	42.74	0.23	0.45	0.98	1340.68
34	2.00	0.00	5.21	0.59	0.64	0.69	2.36	7.28	47.11	0.21	0.63	0.98	1374.28
35	2.00	0.00	5.18	0.74	0.63	0.71	2.36	7.37	57.97	0.12	0.68	0.99	1407.88
36	2.00	0.00	4.17	0.75	0.61	0.77	2.65	7.87	41.99	0.26	0.38	0.98	1441.48
37	2.00	0.00	4.33	0.80	0.63	0.74	2.95	7.67	49.05	0.17	0.60	1.00	1475.08
38	2.00	0.00	4.11	0.89	0.56	0.86	2.78	7.99	55.39	0.14	0.59	0.99	1508.68
39	2.00	0.00	4.32	0.83	0.63	0.75	2.49	7.54	48.71	0.18	0.67	0.59	1542.28
40	2.00	0.00	4.33	0.86	0.62	0.87	2.72	7.09	41.81	0.21	0.71	0.21	1575.88

********** SUMMARY DATA **********

SUBJECT: D DATE: 10672 RUN: D3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	4.22	0.86	0.55	0.86	2.54	7.34	47.54	0.25	0.26	0.20	303.36
2	1.61	0.00	4.03	0.69	0.65	0.65	2.90	7.78	50.17	0.19	0.41	0.18	336.96
3	2.00	0.00	4.00	0.81	0.57	0.86	2.77	7.41	45.47	0.23	0.42	0.20	370.56
4	2.00	0.00	4.02	0.65	0.63	0.61	2.80	7.53	49.15	0.24	0.14	0.20	404.16
5	2.00	0.00	4.03	0.53	0.73	0.59	4.06	7.03	47.32	0.25	-1.06	0.25	437.76
6	2.00	0.00	3.84	0.50	0.78	0.41	2.99	5.88	48.29	0.23	0.13	1.11	471.36
7	2.00	0.00	5.24	0.61	0.82	0.46	3.20	6.93	36.27	0.27	0.28	2.11	504.96
8	2.00	0.00	3.76	0.72	0.81	0.49	3.58	7.07	37.09	0.25	0.16	2.91	538.56
9	2.00	0.00	3.94	0.58	0.88	0.47	3.35	7.57	31.45	0.30	0.00	2.93	572.16
10	2.00	0.00	3.77	0.74	0.84	0.51	3.41	7.42	39.27	0.22	0.42	2.92	605.76
11	2.00	0.00	3.25	0.61	0.86	0.48	3.73	7.42	35.19	0.21	0.63	2.92	639.36
12	2.00	0.00	3.45	0.63	0.82	0.45	3.57	7.05	44.43	0.19	0.44	2.89	672.96
13	2.00	0.00	4.34	0.56	0.81	0.43	3.03	7.12	41.61	0.25	0.27	2.90	706.56
14	2.00	0.00	3.51	0.79	0.80	0.52	3.21	6.65	42.27	0.19	0.71	2.89	740.16
15	2.00	0.00	4.33	0.80	0.78	0.53	3.11	7.07	40.60	0.25	0.27	2.29	773.76
16	2.00	0.00	3.72	0.70	0.73	0.60	4.32	7.80	38.78	0.18	0.48	1.28	807.36
17	2.00	0.00	3.81	0.74	0.63	0.80	3.12	7.35	46.18	0.19	0.52	0.31	840.96
18	2.00	0.00	3.75	0.74	0.63	0.77	2.98	6.87	40.70	0.23	0.49	0.98	874.56
19	2.00	0.00	3.83	0.80	0.61	0.84	3.25	7.33	39.28	0.24	0.33	1.01	908.16
20	2.00	0.00	3.49	0.87	0.60	0.81	2.81	7.66	44.49	0.23	0.44	1.00	941.76
21	2.00	0.00	3.46	0.85	0.60	0.82	2.95	7.16	42.41	0.24	0.39	0.99	975.36
22	2.00	0.00	3.33	0.82	0.62	0.80	3.12	7.72	43.04	0.23	0.30	1.01	1008.96
23	2.00	0.00	3.48	0.87	0.58	0.85	3.01	7.80	43.05	0.22	0.43	0.99	1042.56
24	2.00	0.00	4.10	0.80	0.59	0.85	2.94	7.18	43.30	0.23	0.37	1.01	1076.16
25	2.00	0.00	3.61	0.84	0.60	0.88	3.16	7.24	44.45	0.19	0.57	0.99	1109.76
26	2.00	0.00	3.79	0.77	0.56	0.80	2.88	7.53	51.26	0.18	0.47	1.01	1143.36
27	2.00	0.00	3.15	0.85	0.57	0.87	2.90	6.86	43.50	0.22	0.46	1.01	1176.96
28	2.00	0.00	3.62	0.69	0.62	0.77	3.05	6.97	43.01	0.26	0.11	1.01	1210.56
29	2.00	0.00	4.50	0.71	0.55	0.79	2.45	7.29	54.94	0.20	0.31	0.99	1244.16
30	2.00	0.00	3.44	0.83	0.60	0.84	3.30	7.99	40.38	0.23	0.39	1.00	1277.76
31	2.00	0.00	4.10	0.80	0.58	0.80	2.72	7.68	47.76	0.23	0.27	1.01	1311.36
32	2.00	0.00	3.56	0.83	0.59	0.80	2.58	6.68	42.92	0.26	0.40	0.99	1344.96
33	2.00	0.00	3.70	0.84	0.63	0.82	3.10	7.83	41.74	0.23	0.43	1.01	1378.56
34	2.00	0.00	3.64	0.86	0.56	0.86	2.71	7.23	47.41	0.22	0.36	1.00	1412.16
35	2.00	0.00	3.87	0.82	0.61	0.83	2.97	7.43	42.31	0.22	0.49	1.00	1445.76
36	2.00	0.00	4.42	0.81	0.63	0.72	2.51	7.10	46.90	0.20	0.60	1.00	1479.36
37	2.00	0.00	4.35	0.61	0.72	0.62	2.95	7.91	38.59	0.25	0.44	0.61	1512.96
38	2.00	0.00	3.62	0.75	0.59	0.75	3.11	7.69	48.46	0.20	0.30	0.20	1546.56
39	2.00	0.00	3.66	0.70	0.63	0.73	3.10	6.89	42.66	0.25	0.20	0.21	1580.16

********** SUMMARY DATA **********

SUBJECT: E DATE: 20672 RUN: E3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PMARH DEG	TAUH SEC	ALPHA R/S	GZ (G)	TIME SEC
1	0.50	0.00	3.44	0.73	0.75	0.75	4.06	7.47	27.67	0.17	1.59	0.20	271.58
2	0.89	0.00	3.17	0.59	0.71	0.67	3.63	7.32	48.11	0.12	1.07	0.19	305.18
3	1.00	0.00	3.58	0.60	0.75	0.63	3.29	6.87	34.24	0.23	0.67	0.19	338.78
4	1.38	0.00	3.11	0.64	0.70	0.70	4.09	7.44	33.71	0.21	0.59	0.19	372.38
5	2.00	0.00	3.15	0.66	0.67	0.70	3.57	7.58	45.84	0.14	0.91	0.19	405.98
6	2.00	0.00	4.18	0.64	0.63	0.74	2.66	6.94	42.98	0.21	0.71	0.31	439.58
7	2.00	0.00	4.57	0.59	0.78	0.52	2.78	6.72	39.87	0.27	0.37	1.11	473.18
8	2.00	0.00	4.40	0.56	0.84	0.42	2.67	6.41	44.82	0.22	0.53	1.85	506.78
9	2.00	0.00	3.94	0.64	0.89	0.51	3.30	7.38	28.58	0.29	0.35	1.87	540.38
10	2.00	0.00	4.72	0.68	0.87	0.50	2.91	7.34	35.59	0.28	0.43	1.87	573.98
11	2.00	0.00	3.71	0.51	0.88	0.38	3.08	6.98	43.10	0.20	0.61	1.85	607.58
12	2.00	0.00	3.80	0.71	0.80	0.49	2.97	6.49	45.53	0.18	0.71	1.86	641.18
13	2.00	0.00	4.08	0.70	0.82	0.52	3.05	5.59	34.34	0.22	0.87	1.84	674.78
14	2.00	0.00	4.68	0.66	0.83	0.52	3.09	6.89	38.77	0.21	0.72	1.85	708.38
15	2.00	0.00	4.12	0.51	0.88	0.46	3.66	7.48	29.21	0.26	0.41	1.87	741.98
16	2.00	0.00	4.66	0.58	0.95	0.49	4.18	7.18	28.20	0.17	1.46	1.84	775.58
17	2.00	0.00	3.70	0.62	0.81	0.43	3.10	6.23	51.53	0.18	0.39	1.86	809.18
18	2.00	0.00	5.57	0.47	0.80	0.51	2.97	7.16	43.96	0.22	0.41	1.48	842.78
19	2.00	0.00	4.70	0.39	0.75	0.55	2.83	7.60	50.25	0.11	1.09	0.50	876.38
20	2.00	0.00	4.15	0.60	0.71	0.63	2.76	6.69	43.31	0.23	0.53	0.98	909.98
21	2.00	0.00	3.63	0.62	0.68	0.75	3.58	6.85	33.03	0.26	0.23	0.99	943.58
22	2.00	0.00	3.69	0.58	0.75	0.63	3.50	7.65	36.05	0.21	0.69	0.98	977.18
23	2.00	0.00	3.45	0.74	0.71	0.79	3.69	8.24	29.16	0.23	0.76	0.99	1010.78
24	2.00	0.00	3.46	0.67	0.67	0.75	3.72	8.03	32.00	0.27	0.05	1.00	1044.38
25	2.00	0.00	3.61	0.66	0.68	0.75	3.32	6.64	35.18	0.25	0.41	0.98	1077.98
26	2.00	0.00	3.83	0.53	0.79	0.57	3.72	5.40	36.85	0.15	1.43	0.99	1111.58
27	2.00	0.00	4.24	0.51	0.77	0.50	3.02	6.52	45.33	0.23	0.30	0.98	1145.18
28	2.00	0.00	3.85	0.67	0.73	0.77	4.07	8.07	28.70	0.15	1.91	0.99	1178.78
29	2.00	0.00	3.81	0.50	0.69	0.64	3.04	7.46	39.81	0.25	0.37	0.99	1212.38
30	2.00	0.00	5.13	0.57	0.85	0.62	3.69	7.33	28.20	0.24	0.65	1.00	1245.98
31	2.00	0.00	3.88	0.57	0.72	0.64	3.38	7.38	42.88	0.19	0.60	0.98	1279.58
32	2.00	0.00	4.39	0.47	0.78	0.60	3.63	5.94	30.08	0.26	0.39	0.99	1313.18
33	2.00	0.00	3.23	0.50	0.69	0.56	3.44	7.41	43.51	0.23	0.08	0.99	1346.78
34	2.00	0.00	4.21	0.53	0.79	0.59	3.36	8.47	32.61	0.24	0.71	0.98	1380.38
35	2.00	0.00	3.90	0.57	0.70	0.69	3.36	5.83	34.62	0.23	0.70	0.98	1413.98
36	2.00	0.00	4.19	0.58	0.71	0.63	2.94	5.86	38.42	0.21	0.83	0.99	1447.58
37	2.00	0.00	4.58	0.55	0.74	0.63	3.12	6.75	34.57	0.27	0.41	0.98	1481.18
38	2.00	0.00	5.55	0.54	0.64	0.71	2.93	5.89	45.16	0.24	0.26	0.97	1514.78
39	2.00	0.00	5.39	0.68	0.69	0.75	2.72	5.59	35.63	0.26	0.69	0.46	1548.38
40	2.00	0.00	3.93	0.63	0.66	0.63	2.88	6.14	44.47	0.26	0.16	0.19	1581.98

********** SUMMARY DATA **********

SUBJECT: F DATE: 20672 RUN: F3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PHARH DEG	TAUH SEC	ALPHA R/S	GZ (G)	TIME SEC
1	0.50	0.00	4.94	0.69	0.58	0.70	2.16	9.12	56.44	0.22	0.24	0.20	286.26
2	0.90	0.00	5.60	0.64	0.55	0.73	1.70	7.62	54.69	0.15	0.60	0.19	319.86
3	1.97	0.00	6.61	0.76	0.55	0.71	1.54	6.21	54.18	0.14	0.63	0.19	353.46
4	2.00	0.00	8.86	0.64	0.57	0.66	1.60	8.21	53.54	0.21	0.48	0.20	387.06
5	2.00	0.00	7.99	0.64	0.56	0.79	1.60	7.23	60.84	0.16	0.39	0.20	420.66
6	2.00	0.00	8.83	0.31	0.61	0.68	2.02	6.33	54.04	0.24	0.27	0.59	454.26
7	2.00	0.00	5.56	0.50	0.70	0.50	2.11	6.90	53.09	0.21	0.43	1.59	487.86
8	2.00	0.00	6.53	0.51	0.83	0.37	2.11	5.30	49.37	0.30	0.15	2.61	521.46
9	2.00	0.00	6.99	0.56	0.88	0.36	1.73	6.78	52.34	0.16	0.67	2.88	555.06
10	2.00	0.00	4.07	0.40	0.80	0.46	3.15	6.56	47.35	0.16	0.77	2.87	588.66
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.90	622.26
12	0.50	0.00	7.79	0.44	0.87	0.40	2.80	8.00	39.13	0.29	0.21	2.90	664.54
13	1.65	0.00	6.98	0.50	1.04	0.34	2.62	4.01	36.18	0.31	0.31	2.92	698.14
14	2.00	0.00	7.50	0.61	0.92	0.34	2.33	5.88	52.97	0.32	-0.21	2.89	731.74
15	2.00	0.00	7.06	0.48	0.90	0.40	2.40	7.29	62.07	0.04	0.95	2.50	765.34
16	2.00	0.00	8.13	0.52	0.65	0.44	1.52	5.60	66.23	0.18	0.22	1.53	798.94
17	2.00	0.00	7.87	0.51	0.58	0.60	1.24	7.51	104.01	-0.73	0.81	0.51	832.54
18	2.00	0.00	6.01	0.64	0.63	0.58	2.55	5.82	54.76	0.18	0.39	0.88	866.14
19	2.00	0.00	6.29	0.46	0.74	0.44	2.77	7.40	52.44	0.20	0.30	0.99	899.74
20	2.00	0.00	7.56	0.54	0.87	0.48	1.97	7.38	43.33	0.26	0.59	0.99	933.34
21	2.00	0.00	4.45	0.51	0.69	0.50	2.53	5.44	50.23	0.30	-0.15	0.99	966.94
22	2.00	0.00	6.44	0.39	0.81	0.44	2.70	7.41	46.06	0.22	0.50	1.00	1000.54
23	2.00	0.00	5.50	0.42	0.61	0.46	2.38	8.37	66.58	0.21	-0.22	0.99	1034.14
24	2.00	0.00	5.42	0.60	0.59	0.61	1.98	8.00	58.23	0.21	0.26	0.98	1067.74
25	2.00	0.00	7.70	0.72	0.79	0.53	2.00	5.90	50.79	0.13	0.83	0.99	1101.34
26	2.00	0.00	5.13	0.66	0.74	0.51	2.47	8.30	53.29	0.25	0.04	1.00	1134.94
27	2.00	0.00	4.65	0.66	0.61	0.72	2.82	6.56	52.29	0.19	0.33	1.00	1168.54
28	2.00	0.00	5.37	0.84	0.62	0.77	2.24	7.26	43.20	0.30	0.35	0.99	1202.14
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	1235.74
30	0.50	0.00	4.59	0.82	0.56	0.80	2.89	7.18	51.81	0.20	0.27	0.98	1279.88
31	0.82	0.00	5.77	0.83	0.57	0.77	1.88	6.50	51.58	0.24	0.42	1.00	1313.48
32	1.89	0.00	6.08	0.79	0.50	0.85	1.90	6.14	60.78	0.14	0.46	0.99	1347.08
33	2.00	0.00	7.12	0.70	0.66	0.63	1.72	8.01	49.36	0.22	0.58	0.99	1380.68
34	2.00	0.00	6.39	0.83	0.48	0.82	1.60	6.61	62.35	0.20	0.27	1.00	1414.28
35	2.00	0.00	5.07	0.75	0.58	0.61	1.67	3.32	48.18	0.49	-0.14	0.99	1447.88
36	2.00	0.00	7.18	0.74	0.42	0.79	1.32	4.87	63.46	0.24	0.20	0.99	1481.48
37	2.00	0.00	8.15	0.62	0.42	0.60	0.99	7.25	84.73	0.77	-0.67	0.55	1515.08
38	2.00	0.00	8.74	0.30	0.61	0.52	1.66	8.85	66.80	0.30	-0.16	0.20	1548.68
39	2.00	0.00	4.98	0.32	0.65	0.40	2.50	7.67	73.44	0.23	-0.72	0.20	1582.28

GROUP START 117. SEC

CRITICAL TASK VERTICAL NYCV=0 HORIZONTAL NYCH=4

********** SUMMARY DATA **********

SUBJECT: G DATE: 20672 RUN: G3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.97	0.78	0.52	0.84	2.64	9.05	59.99	0.16	0.27	0.20	285.70
2	1.57	0.00	3.55	0.90	0.53	0.90	2.78	8.86	52.36	0.18	0.44	0.20	319.30
3	2.00	0.00	3.52	0.80	0.50	0.89	2.50	8.16	58.40	0.17	0.29	0.20	352.90
4	2.00	0.00	3.60	0.75	0.57	0.80	2.57	8.19	53.55	0.18	0.43	0.20	386.50
5	2.00	0.00	3.17	0.75	0.62	0.78	3.59	7.74	39.76	0.22	0.36	0.20	420.10
6	2.00	0.00	4.10	0.60	0.66	0.63	3.11	7.58	48.50	0.19	0.44	0.55	453.70
7	2.00	0.00	3.27	0.69	0.67	0.63	4.06	7.99	45.47	0.18	0.18	1.57	487.30
8	2.00	0.00	2.94	0.77	0.69	0.68	4.34	8.13	35.89	0.16	1.13	1.87	520.90
9	2.00	0.00	3.31	0.82	0.67	0.73	3.59	7.96	37.81	0.24	0.20	1.87	554.50
10	2.00	0.00	3.32	0.66	0.67	0.66	3.84	7.19	45.03	0.23	-0.36	1.85	588.10
11	2.00	0.00	3.14	0.76	0.65	0.73	3.48	7.81	41.43	0.21	0.39	1.87	621.70
12	2.00	0.00	3.04	0.69	0.67	0.67	3.53	7.96	46.43	0.15	0.82	1.87	655.30
13	2.00	0.00	3.30	0.68	0.71	0.60	3.64	7.73	37.03	0.23	0.36	1.87	688.90
14	2.00	0.00	3.48	0.42	0.70	0.56	3.44	8.14	41.49	0.30	-0.59	1.87	722.50
15	2.00	0.00	2.93	0.78	0.68	0.64	4.10	7.74	39.91	0.17	0.71	1.90	756.10
16	2.00	0.00	3.05	0.85	0.67	0.75	4.28	7.48	39.56	0.21	-0.05	1.87	789.70
17	2.00	0.00	3.37	0.73	0.66	0.58	3.24	7.65	47.71	0.20	0.24	1.86	823.30
18	2.00	0.00	3.45	0.74	0.70	0.69	3.42	8.35	39.52	0.23	0.29	1.08	856.90
19	2.00	0.00	4.19	0.79	0.65	0.81	3.21	8.32	40.28	0.19	0.79	0.75	890.50
20	2.00	0.00	3.26	0.87	0.55	0.88	2.76	9.62	51.63	0.19	0.37	1.01	924.10
21	2.00	0.00	3.50	0.92	0.56	0.87	2.85	9.09	49.93	0.19	0.41	1.00	957.70
22	2.00	0.00	3.84	0.80	0.56	0.85	2.89	8.04	47.27	0.22	0.33	1.00	991.30
23	2.00	0.00	3.30	0.82	0.56	0.78	2.97	7.60	50.17	0.24	-0.09	1.00	1024.90
24	2.00	0.00	3.58	0.80	0.55	0.83	2.65	8.27	56.34	0.15	0.49	0.99	1058.50
25	2.00	0.00	3.43	0.82	0.59	0.83	2.97	7.66	45.55	0.22	0.35	0.99	1092.10
26	2.00	0.00	3.51	0.88	0.58	0.86	3.21	7.82	45.64	0.21	0.33	0.99	1125.70
27	2.00	0.00	3.68	0.83	0.57	0.80	2.85	6.18	51.78	0.17	0.49	0.99	1159.30
28	2.00	0.00	3.53	0.72	0.61	0.77	3.41	7.44	47.34	0.17	0.51	0.99	1192.90
29	2.00	0.00	3.74	0.74	0.58	0.83	2.99	8.48	46.13	0.22	0.36	1.00	1226.50
30	2.00	0.00	3.52	0.76	0.54	0.79	2.93	8.28	56.27	0.18	0.20	0.99	1260.10
31	2.00	0.00	3.00	0.75	0.58	0.81	3.17	8.00	47.29	0.18	0.53	0.98	1293.70
32	2.00	0.00	3.65	0.90	0.55	0.85	2.92	7.89	49.92	0.22	0.13	0.98	1327.30
33	2.00	0.00	3.65	0.88	0.53	0.89	3.04	8.23	50.87	0.20	0.23	0.99	1360.90
34	2.00	0.00	3.29	0.85	0.57	0.86	3.23	8.70	47.17	0.18	0.54	0.99	1394.50
35	2.00	0.00	3.29	0.89	0.56	0.85	2.93	7.93	48.33	0.23	0.18	0.99	1428.10
36	2.00	0.00	3.53	0.78	0.53	0.83	2.86	7.74	50.88	0.21	0.28	1.00	1461.70
37	2.00	0.00	4.23	0.82	0.60	0.83	2.79	8.14	46.13	0.21	0.50	0.99	1495.30
38	2.00	0.00	3.18	0.57	0.63	0.63	3.09	7.36	67.48	0.06	0.63	0.82	1528.90
39	2.00	0.00	3.44	0.67	0.59	0.83	3.19	8.34	43.88	0.22	0.36	0.20	1562.50
40	2.00	0.00	3.45	0.80	0.58	0.77	3.16	7.41	52.63	0.19	0.16	0.19	1596.10

********** SUMMARY DATA **********

SUBJECT: H DATE: 20672 RUN: H3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RH0E2H	RMSCH	RH0C2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.21	0.78	0.68	0.74	3.63	9.58	41.90	0.22	0.19	0.20	272.98
2	1.56	0.00	3.13	0.67	0.71	0.58	3.81	8.41	43.87	0.16	0.69	0.20	306.58
3	2.00	0.00	3.02	0.72	0.60	0.75	3.32	7.71	42.24	0.24	0.09	0.20	340.18
4	2.00	0.00	3.13	0.77	0.69	0.67	3.67	7.84	37.49	0.23	0.20	0.20	373.78
5	2.00	0.00	2.78	0.73	0.68	0.62	3.74	9.12	52.14	0.15	0.35	0.20	407.38
6	2.00	0.00	3.97	0.51	0.74	0.54	3.42	8.22	42.50	0.22	0.30	0.27	440.98
7	2.00	0.00	3.31	0.40	0.79	0.49	4.05	7.85	45.67	0.22	-0.48	1.21	474.58
8	2.00	0.00	3.35	0.60	0.74	0.57	3.79	7.52	53.03	0.23	-0.79	2.19	508.18
9	2.00	0.00	3.18	0.73	0.72	0.51	3.29	8.23	43.30	0.21	0.39	2.90	541.78
10	2.00	0.00	3.13	0.60	0.82	0.52	4.08	7.98	36.48	0.18	0.76	2.91	575.38
11	2.00	0.00	3.86	0.65	0.78	0.53	3.49	8.02	40.66	0.24	0.08	2.89	608.98
12	2.00	0.00	3.16	0.68	0.82	0.53	3.68	7.62	41.66	0.19	0.49	2.90	642.58
13	2.00	0.00	2.94	0.71	0.77	0.57	4.05	7.85	39.55	0.19	0.51	2.92	676.18
14	2.00	0.00	3.61	0.58	0.86	0.45	3.63	7.14	38.11	0.20	0.60	2.91	709.78
15	2.00	0.00	3.44	0.65	0.83	0.54	3.95	8.16	33.59	0.15	1.49	2.90	743.38
16	2.00	0.00	3.49	0.71	0.78	0.52	3.72	6.87	37.26	0.22	0.37	2.18	776.98
17	2.00	0.00	3.23	0.61	0.72	0.60	3.55	7.53	41.78	0.20	0.46	1.17	810.58
18	2.00	0.00	4.16	0.72	0.66	0.69	3.06	8.13	46.86	0.19	0.51	0.39	844.18
19	2.00	0.00	3.52	0.71	0.74	0.60	3.37	7.84	36.63	0.25	0.26	0.98	877.78
20	2.00	0.00	2.98	0.75	0.70	0.62	3.77	8.07	44.51	0.20	0.13	0.99	911.38
21	2.00	0.00	2.57	0.67	0.70	0.62	4.44	8.54	36.71	0.14	1.28	1.01	944.98
22	2.00	0.00	3.08	0.76	0.69	0.67	3.89	8.05	38.87	0.19	0.62	1.00	978.58
23	2.00	0.00	2.97	0.76	0.67	0.77	3.88	8.38	36.51	0.14	1.45	0.99	1012.18
24	2.00	0.00	3.48	0.74	0.68	0.64	3.57	8.20	41.14	0.22	0.18	0.99	1045.78
25	2.00	0.00	2.98	0.78	0.65	0.72	4.18	8.55	42.04	0.17	0.60	0.99	1079.38
26	2.00	0.00	3.41	0.77	0.70	0.64	3.43	9.30	39.44	0.23	0.28	0.99	1112.98
27	2.00	0.00	3.49	0.68	0.62	0.70	3.25	7.72	48.14	0.22	0.08	1.00	1146.58
28	2.00	0.00	2.82	0.75	0.68	0.72	3.83	8.28	35.68	0.18	1.03	0.99	1180.18
29	2.00	0.00	2.93	0.76	0.67	0.76	3.71	8.44	35.81	0.23	0.40	1.00	1213.78
30	2.00	0.00	3.21	0.70	0.72	0.63	3.68	8.86	34.89	0.24	0.36	1.00	1247.38
31	2.00	0.00	3.16	0.73	0.72	0.67	3.95	8.03	30.54	0.17	1.46	0.99	1280.98
32	2.00	0.00	2.69	0.78	0.68	0.67	4.29	8.48	36.61	0.17	0.87	1.00	1314.58
33	2.00	0.00	3.06	0.81	0.71	0.70	3.99	8.49	35.82	0.20	0.53	1.00	1348.18
34	2.00	0.00	2.82	0.79	0.72	0.72	4.54	9.24	34.38	0.15	1.41	0.99	1381.78
35	2.00	0.00	2.83	0.74	0.70	0.67	4.06	7.85	33.65	0.17	1.16	1.00	1415.38
36	2.00	0.00	2.96	0.74	0.73	0.68	4.60	7.76	27.61	0.17	1.36	0.99	1448.98
37	2.00	0.00	3.15	0.75	0.67	0.67	3.27	8.73	46.90	0.18	0.58	0.98	1482.58
38	2.00	0.00	3.11	0.81	0.70	0.75	4.05	9.12	32.05	0.09	2.57	0.55	1516.18
39	2.00	0.00	3.15	0.79	0.64	0.81	3.86	8.21	43.44	0.20	0.21	0.20	1549.78

********** SUMMARY DATA **********

SUBJECT: I DATE: 20672 RUN: I3 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHAPH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	2.29	0.72	0.70	0.76	5.02	9.42	30.23	0.15	1.37		277.16
2	0.50	0.00	2.20	0.77	0.64	0.79	4.60	9.15	34.22	0.14	1.43		310.76
3	1.59	0.00	2.50	0.75	0.66	0.81	4.63	8.36	30.31	0.19	0.74		344.36
4	2.00	0.00	2.48	0.73	0.71	0.73	4.75	8.00	26.74	0.17	1.45		377.96
5	2.00	0.00	3.05	0.72	0.69	0.76	3.94	7.95	33.35	0.17	1.23		411.56
6	2.00	0.00	2.81	0.77	0.73	0.76	4.61	8.46	28.81	0.16	1.59		445.16
7	2.00	0.00	2.99	0.74	0.66	0.77	3.66	8.41	37.30	0.18	0.90		478.76
8	2.00	0.00	2.64	0.81	0.61	0.85	3.50	8.10	39.40	0.20	0.59		512.36
9	2.00	0.00	3.08	0.70	0.62	0.77	3.45	7.98	43.94	0.18	0.62		545.96
10	2.00	0.00	3.04	0.73	0.66	0.77	3.85	8.57	36.07	0.15	1.38		579.56
11	2.00	0.00	4.16	0.56	0.64	0.76	3.83	8.29	41.71	0.18	0.57		613.16
12	2.00	0.00	3.10	0.64	0.63	0.76	3.51	8.33	47.05	0.16	0.64		646.76
13	2.00	0.00	2.90	0.76	0.63	0.83	3.59	8.23	38.78	0.20	0.65		680.36
14	2.00	0.00	3.26	0.64	0.61	0.77	3.67	8.12	45.15	0.18	0.42		713.96
15	2.00	0.00	3.10	0.71	0.60	0.84	3.22	7.76	43.49	0.22	0.34		747.56
16	2.00	0.00	2.97	0.80	0.57	0.86	3.03	8.56	42.77	0.22	0.47		781.16
17	2.00	0.00	2.89	0.74	0.61	0.85	3.56	7.76	37.96	0.21	0.51	GZ = 1.00	814.76
18	2.00	0.00	3.02	0.82	0.59	0.85	3.11	7.95	44.65	0.19	0.63		848.36
19	2.00	0.00	3.11	0.72	0.56	0.81	3.08	7.74	54.20	0.15	0.48		881.96
20	2.00	0.00	2.77	0.78	0.59	0.87	3.61	7.41	37.77	0.23	0.28		915.56
21	2.00	0.00	3.48	0.66	0.59	0.82	3.10	7.64	45.43	0.21	0.41		949.16
22	2.00	0.00	4.07	0.63	0.61	0.83	3.61	7.61	41.87	0.20	0.45		982.76
23	2.00	0.00	3.22	0.81	0.57	0.86	3.12	7.82	47.47	0.20	0.37		1016.36
24	2.00	0.00	3.28	0.68	0.62	0.80	3.72	7.79	35.36	0.23	0.30		1049.96
25	2.00	0.00	3.31	0.80	0.61	0.86	3.53	8.05	40.10	0.20	0.63		1083.56
26	2.00	0.00	3.78	0.60	0.60	0.73	2.86	7.35	46.66	0.20	0.52		1117.16
27	2.00	0.00	3.16	0.67	0.60	0.85	3.64	8.01	40.86	0.20	0.46		1150.76
28	2.00	0.00	2.94	0.66	0.60	0.83	3.77	7.89	36.37	0.17	1.04		1184.36
29	2.00	0.00	2.82	0.75	0.63	0.85	3.85	8.20	32.78	0.16	1.46		1217.96
30	2.00	0.00	3.09	0.81	0.60	0.83	3.19	7.47	40.21	0.22	0.58		1251.56
31	2.00	0.00	3.31	0.81	0.58	0.83	3.44	7.73	41.00	0.23	0.20		1285.16
32	2.00	0.00	3.10	0.72	0.61	0.83	3.54	7.63	41.74	0.19	0.59		1318.76
33	2.00	0.00	3.70	0.77	0.61	0.86	3.21	8.01	40.58	0.23	0.37		1352.36
34	2.00	0.00	3.29	0.75	0.56	0.85	2.97	7.84	46.19	0.22	0.35		1385.96
35	2.00	0.00	3.25	0.70	0.62	0.77	3.30	7.44	41.26	0.22	0.42		1419.56
36	2.00	0.00	3.33	0.71	0.63	0.84	3.50	7.18	39.98	0.20	0.56		1453.16
37	2.00	0.00	3.25	0.80	0.58	0.84	3.14	7.67	43.15	0.22	0.41		1486.76
38	2.00	0.00	3.08	0.68	0.57	0.81	3.10	8.04	44.32	0.21	0.46		1520.36
39	2.00	0.00	3.01	0.74	0.56	0.88	3.25	7.54	44.90	0.21	0.37		1553.96

********** SUMMARY DATA **********

SUBJECT: A DATE: 30672 RUN: A4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RMSE2H	RMSCH	RMSC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.22	0.71	0.64	0.74	3.68	6.90	38.96	0.20	0.54	0.20	258.10
2	0.50	0.00	3.64	0.76	0.76	0.67	3.58	7.64	31.38	0.27	0.24	0.20	291.70
3	1.65	0.00	2.98	0.76	0.63	0.70	3.56	7.81	42.27	0.22	0.12	0.20	325.30
4	2.00	0.00	3.35	0.78	0.64	0.80	3.31	7.03	43.58	0.19	0.63	0.20	358.90
5	2.00	0.00	3.26	0.78	0.63	0.70	3.16	7.35	46.75	0.21	0.27	0.20	392.50
6	2.00	0.00	3.60	0.71	0.66	0.67	3.33	7.09	42.55	0.23	0.16	0.19	426.10
7	2.00	0.00	3.46	0.73	0.78	0.52	3.34	7.49	40.80	0.23	0.27	0.71	459.70
8	2.00	0.00	3.40	0.63	0.85	0.51	4.49	7.03	29.37	0.21	0.56	1.69	493.30
9	2.00	0.00	3.32	0.67	0.87	0.50	4.44	7.36	33.81	0.21	0.19	1.84	526.90
10	2.00	0.00	3.54	0.52	0.84	0.50	3.93	7.03	37.31	0.21	0.36	1.87	560.50
11	2.00	0.00	3.52	0.69	0.80	0.52	3.44	7.05	46.89	0.16	0.64	1.87	594.10
12	2.00	0.00	3.83	0.76	0.84	0.50	3.44	7.11	38.06	0.21	0.59	1.85	627.70
13	2.00	0.00	3.81	0.65	0.90	0.51	3.74	7.76	33.98	0.18	1.16	1.86	661.30
14	2.00	0.00	3.00	0.65	0.80	0.46	3.90	7.54	37.59	0.17	0.98	1.88	694.90
15	2.00	0.00	3.61	0.56	0.86	0.48	3.34	7.05	47.23	0.14	0.93	1.89	728.50
16	2.00	0.00	3.69	0.71	0.80	0.50	3.37	7.34	43.03	0.23	0.11	1.87	762.10
17	2.00	0.00	3.88	0.67	0.84	0.55	3.29	7.31	39.80	0.20	0.70	1.84	795.70
18	2.00	0.00	3.81	0.64	0.85	0.44	3.26	7.52	43.63	0.25	0.02	1.85	829.30
19	2.00	0.00	3.43	0.57	0.71	0.64	3.97	7.94	42.48	0.16	0.81	0.90	862.90
20	2.00	0.00	3.36	0.70	0.66	0.74	3.69	7.39	37.40	0.22	0.40	0.86	896.50
21	2.00	0.00	3.56	0.78	0.62	0.72	3.03	7.31	51.64	0.19	0.27	0.98	930.10
22	2.00	0.00	3.57	0.79	0.59	0.85	3.21	7.24	44.83	0.19	0.61	0.98	963.70
23	2.00	0.00	3.21	0.86	0.59	0.79	3.02	6.61	48.38	0.19	0.43	0.99	997.30
24	2.00	0.00	4.00	0.82	0.61	0.78	3.01	7.36	47.93	0.21	0.27	0.99	1030.90
25	2.00	0.00	3.34	0.86	0.58	0.85	3.23	6.84	44.31	0.23	0.22	0.98	1064.50
26	2.00	0.00	3.60	0.78	0.63	0.74	3.12	7.08	46.80	0.20	0.37	0.98	1098.10
27	2.00	0.00	3.87	0.76	0.71	0.73	4.27	7.49	39.80	0.20	0.06	0.98	1131.70
28	2.00	0.00	3.78	0.83	0.62	0.79	3.09	7.92	42.73	0.22	0.40	0.98	1165.30
29	2.00	0.00	4.65	0.76	0.65	0.75	2.96	7.02	41.69	0.25	0.29	0.99	1198.90
30	2.00	0.00	3.84	0.80	0.63	0.75	3.22	7.75	43.55	0.22	0.32	0.98	1232.50
31	2.00	0.00	3.71	0.70	0.57	0.75	2.94	6.86	53.94	0.19	0.20	0.98	1266.10
32	2.00	0.00	3.76	0.76	0.72	0.62	3.05	7.70	43.40	0.25	0.15	0.99	1299.70
33	2.00	0.00	3.55	0.67	0.74	0.62	3.38	8.18	35.15	0.27	0.19	0.99	1333.30
34	2.00	0.00	3.52	0.73	0.66	0.74	3.26	7.44	41.94	0.22	0.36	0.99	1366.90
35	2.00	0.00	4.31	0.79	0.63	0.74	2.93	6.79	42.57	0.27	0.10	0.98	1400.50
36	2.00	0.00	3.67	0.77	0.66	0.73	3.51	7.10	36.82	0.25	0.12	0.99	1434.10
37	2.00	0.00	3.62	0.72	0.66	0.70	3.03	7.38	44.50	0.23	0.33	0.98	1467.70
38	2.00	0.00	3.54	0.73	0.64	0.63	2.85	7.78	59.55	0.12	0.51	0.99	1501.30
39	2.00	0.00	4.00	0.65	0.69	0.66	3.09	7.37	40.66	0.27	0.11	0.72	1534.90
40	2.00	0.00	3.76	0.81	0.63	0.71	3.04	7.53	40.95	0.26	0.18	0.20	1568.50

SUMMARY DATA

SUBJECT: B DATE: 30672 RUN: B4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PHARH DEG	TAUH SEC	ALPHA R/S	GZ (G)	TIME SEC
1	0.50	0.00	3.38	0.90	0.52	0.90	3.02	8.42	51.06	0.22	0.04	0.19	261.16
2	1.43	0.00	3.63	0.86	0.55	0.85	2.82	7.85	54.00	0.16	0.47	0.20	294.76
3	2.00	0.00	3.50	0.88	0.56	0.91	2.83	8.45	45.93	0.19	0.62	0.20	328.36
4	2.00	0.00	3.65	0.83	0.58	0.84	3.07	9.04	47.05	0.18	0.56	0.20	361.96
5	2.00	0.00	3.78	0.81	0.59	0.82	2.94	8.38	52.15	0.17	0.51	0.19	395.56
6	2.00	0.00	3.29	0.84	0.59	0.80	3.25	7.54	49.79	0.16	0.58	0.19	429.16
7	2.00	0.00	3.79	0.82	0.63	0.76	2.64	6.83	44.58	0.19	0.75	0.83	462.76
8	2.00	0.00	3.64	0.74	0.65	0.69	2.83	6.07	44.64	0.21	0.54	1.87	496.36
9	2.00	0.00	4.17	0.76	0.64	0.70	2.74	7.06	42.49	0.27	0.27	2.86	529.96
10	2.00	0.00	3.59	0.74	0.69	0.67	3.13	6.66	43.55	0.17	0.91	2.89	563.56
11	2.00	0.00	3.01	0.81	0.67	0.71	3.68	7.55	38.06	0.20	0.60	2.91	597.16
12	2.00	0.00	3.46	0.73	0.66	0.69	3.03	7.09	40.05	0.24	0.43	2.92	630.76
13	2.00	0.00	2.90	0.77	0.69	0.68	3.48	7.47	37.51	0.21	0.64	2.92	664.36
14	2.00	0.00	3.27	0.87	0.66	0.72	3.26	7.96	37.67	0.24	0.40	2.92	697.96
15	2.00	0.00	3.88	0.77	0.67	0.66	3.00	6.32	44.12	0.23	0.30	2.93	731.56
16	2.00	0.00	3.45	0.69	0.67	0.67	3.55	7.38	37.55	0.23	0.31	2.53	765.16
17	2.00	0.00	3.61	0.77	0.66	0.72	3.20	8.02	43.29	0.20	0.51	1.56	798.76
18	2.00	0.00	3.93	0.82	0.58	0.86	2.70	7.65	50.93	0.17	0.63	0.51	832.36
19	2.00	0.00	3.30	0.86	0.55	0.89	2.88	8.96	48.22	0.21	0.33	0.86	865.96
20	2.00	0.00	3.51	0.85	0.56	0.87	2.90	8.11	53.12	0.15	0.62	0.98	899.56
21	2.00	0.00	3.47	0.89	0.56	0.89	3.03	7.91	47.39	0.20	0.45	0.99	933.16
22	2.00	0.00	4.40	0.83	0.56	0.86	2.52	7.33	51.10	0.19	0.48	1.00	966.76
23	2.00	0.00	3.49	0.87	0.53	0.87	2.70	7.61	56.05	0.15	0.48	0.98	1000.36
24	2.00	0.00	3.37	0.78	0.56	0.83	2.70	6.75	48.72	0.16	0.78	0.99	1033.96
25	2.00	0.00	3.45	0.77	0.58	0.81	3.13	8.56	48.56	0.19	0.40	1.01	1067.56
26	2.00	0.00	3.25	0.82	0.55	0.88	2.76	8.22	46.52	0.20	0.58	0.98	1101.16
27	2.00	0.00	3.35	0.79	0.58	0.82	2.99	8.17	46.00	0.22	0.37	0.99	1134.76
28	2.00	0.00	3.74	0.81	0.58	0.85	2.63	7.55	47.09	0.19	0.62	0.98	1168.36
29	2.00	0.00	3.88	0.74	0.58	0.86	2.91	7.13	46.92	0.19	0.59	0.99	1201.96
30	2.00	0.00	3.19	0.85	0.59	0.85	3.18	7.54	41.92	0.23	0.38	0.99	1235.56
31	2.00	0.00	4.37	0.87	0.63	0.78	3.41	7.75	50.64	0.14	0.69	0.98	1269.16
32	2.00	0.00	3.24	0.78	0.57	0.82	2.95	6.88	44.35	0.22	0.48	0.98	1302.76
33	2.00	0.00	3.22	0.77	0.60	0.84	3.23	6.57	38.82	0.22	0.61	0.98	1336.36
34	2.00	0.00	3.96	0.75	0.61	0.79	2.67	7.37	42.99	0.22	0.66	0.99	1369.96
35	2.00	0.00	3.75	0.80	0.56	0.88	2.62	6.54	49.53	0.18	0.59	0.98	1403.56
36	2.00	0.00	3.77	0.86	0.58	0.87	2.57	7.74	42.07	0.21	0.76	0.99	1437.16
37	2.00	0.00	3.48	0.84	0.60	0.86	2.95	7.34	39.17	0.23	0.58	0.99	1470.76
38	2.00	0.00	4.04	0.71	0.67	0.76	3.26	8.78	35.60	0.25	0.41	0.75	1504.36
39	2.00	0.00	3.38	0.73	0.60	0.81	3.04	6.71	42.76	0.20	0.62	0.20	1537.96

********** SUMMARY DATA **********

SUBJECT: C DATE: 30672 RUN: C4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	2.81	0.76	0.69	0.66	3.56	8.34	39.45	0.20	0.60	0.19	270.10
2	0.61	0.00	3.41	0.65	0.86	0.54	4.15	8.50	33.62	0.19	0.77	0.19	303.70
3	1.79	0.00	5.21	0.42	0.81	0.41	3.08	7.74	44.33	0.27	-0.11	0.19	337.30
4	2.00	0.00	5.04	0.46	0.73	0.57	2.77	6.23	44.34	0.19	0.72	0.19	370.90
5	2.00	0.00	5.19	0.67	0.75	0.60	2.61	7.09	40.66	0.23	0.65	0.19	404.50
6	2.00	0.00	4.05	0.70	0.71	0.67	2.99	7.01	41.16	0.20	0.79	0.28	438.10
7	2.00	0.00	3.60	0.65	0.82	0.47	3.53	8.24	38.76	0.26	-0.06	1.10	471.70
8	2.00	0.00	5.04	0.58	0.79	0.54	2.56	7.26	35.29	0.31	0.45	1.84	505.30
9	2.00	0.00	3.85	0.71	0.77	0.55	3.02	7.47	40.08	0.23	0.50	1.86	538.90
10	2.00	0.00	3.74	0.65	0.80	0.54	3.02	6.54	38.10	0.19	1.05	1.87	572.50
11	2.00	0.00	4.08	0.33	0.96	0.29	3.17	7.29	43.94	0.19	0.60	1.87	606.10
12	2.00	0.00	4.55	0.63	0.90	0.48	3.19	7.40	31.64	0.28	0.40	1.87	639.70
13	2.00	0.00	3.37	0.68	0.82	0.55	3.23	7.05	34.95	0.24	0.59	1.87	673.30
14	2.00	0.00	3.90	0.66	0.88	0.55	3.52	7.05	28.04	0.28	0.28	1.87	706.90
15	2.00	0.00	3.16	0.69	0.75	0.59	3.07	7.66	37.02	0.22	0.74	1.86	740.50
16	2.00	0.00	3.33	0.44	0.80	0.48	3.60	7.14	39.39	0.20	0.62	1.87	774.10
17	2.00	0.00	3.62	0.65	0.79	0.60	3.70	7.39	37.57	0.19	0.79	1.87	807.70
18	2.00	0.00	4.45	0.71	0.69	0.68	2.58	6.74	41.95	0.20	0.81	1.53	841.30
19	2.00	0.00	5.08	0.57	0.66	0.69	2.25	7.23	45.15	0.20	0.74	0.54	874.90
20	2.00	0.00	3.98	0.63	0.66	0.63	2.68	6.14	41.61	0.23	0.63	0.98	908.50
21	2.00	0.00	3.83	0.73	0.64	0.66	2.80	7.73	49.57	0.20	0.40	0.98	942.10
22	2.00	0.00	3.26	0.71	0.58	0.77	2.81	7.54	45.17	0.22	0.49	0.98	975.70
23	2.00	0.00	3.80	0.55	0.76	0.57	3.18	8.44	45.56	0.18	0.63	0.98	1009.30
24	2.00	0.00	3.37	0.68	0.63	0.70	3.15	7.52	48.19	0.18	0.54	0.98	1042.90
25	2.00	0.00	3.19	0.67	0.64	0.67	3.03	8.24	53.67	0.14	0.67	0.98	1076.50
26	2.00	0.00	3.19	0.72	0.67	0.65	3.38	7.47	44.97	0.23	0.07	0.98	1110.10
27	2.00	0.00	3.33	0.66	0.64	0.65	2.98	7.64	50.80	0.19	0.33	0.98	1143.70
28	2.00	0.00	3.83	0.71	0.67	0.67	3.17	6.60	45.01	0.18	0.71	0.98	1177.30
29	2.00	0.00	3.63	0.61	0.69	0.66	3.05	8.46	42.82	0.20	0.66	0.99	1210.90
30	2.00	0.00	3.97	0.62	0.69	0.67	3.25	7.76	44.26	0.19	0.64	0.99	1244.50
31	2.00	0.00	3.53	0.76	0.58	0.78	2.60	6.81	53.41	0.16	0.56	0.98	1278.10
32	2.00	0.00	3.84	0.82	0.58	0.81	2.74	8.43	47.44	0.19	0.58	0.98	1311.70
33	2.00	0.00	3.49	0.84	0.60	0.81	2.88	7.81	46.96	0.18	0.63	0.98	1345.30
34	2.00	0.00	3.06	0.78	0.59	0.78	3.35	7.32	48.29	0.18	0.45	0.99	1378.90
35	2.00	0.00	4.16	0.81	0.57	0.78	2.21	6.47	55.34	0.16	0.55	0.99	1412.50
36	2.00	0.00	2.90	0.69	0.62	0.72	3.20	8.19	49.83	0.15	0.67	0.98	1446.10
37	2.00	0.00	3.29	0.83	0.62	0.78	3.13	8.54	44.26	0.20	0.50	0.99	1479.70
38	2.00	0.00	5.08	0.76	0.58	0.77	2.28	7.54	53.92	0.23	0.22	0.98	1513.30
39	2.00	0.00	4.29	0.78	0.58	0.82	2.58	7.78	47.27	0.22	0.44	0.49	1546.90
40	2.00	0.00	3.37	0.78	0.63	0.80	3.32	7.74	50.18	0.11	1.04	0.20	1580.50

********** SUMMARY DATA **********

SUBJECT: D DATE: 30672 RUN: D4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PMARH DEG	TAUH SEC	ALPHA R/S	GZ (G)	TIME SEC
1	0.50	0.00	3.56	0.82	0.67	0.68	3.59	7.38	43.23	0.20	0.29	0.20	320.94
2	1.10	0.00	3.28	0.79	0.62	0.76	3.33	8.50	40.00	0.25	0.12	0.19	354.54
3	2.00	0.00	3.46	0.66	0.64	0.63	2.63	6.90	53.21	0.18	0.47	0.20	388.14
4	2.00	0.00	3.68	0.69	0.66	0.64	3.56	7.48	41.51	0.22	0.16	0.20	421.74
5	2.00	0.00	3.50	0.66	0.77	0.50	3.42	7.44	37.02	0.25	0.29	0.62	455.34
6	2.00	0.00	2.96	0.61	0.88	0.47	4.66	7.39	30.51	0.21	0.35	1.64	488.94
7	2.00	0.00	3.18	0.82	0.79	0.55	3.65	7.61	35.99	0.22	0.51	2.64	522.54
8	2.00	0.00	3.81	0.67	0.84	0.50	3.51	7.66	33.94	0.24	0.43	2.92	556.14
9	2.00	0.00	3.39	0.59	0.82	0.44	3.33	6.63	48.13	0.20	0.21	2.91	589.74
10	2.00	0.00	3.69	0.56	0.82	0.45	3.96	6.67	35.34	0.23	0.14	2.90	623.34
11	2.00	0.00	3.49	0.76	0.77	0.56	3.24	6.84	39.56	0.24	0.37	2.93	656.94
12	2.00	0.00	3.27	0.78	0.80	0.54	3.37	6.71	40.88	0.19	0.76	2.92	690.54
13	2.00	0.00	3.49	0.78	0.78	0.51	3.14	6.24	41.84	0.20	0.65	2.92	724.14
14	2.00	0.00	3.88	0.56	0.84	0.46	3.39	6.60	36.59	0.25	0.30	2.74	757.74
15	2.00	0.00	3.61	0.78	0.79	0.54	3.42	7.77	37.57	0.22	0.50	1.76	791.34
16	2.00	0.00	4.16	0.74	0.64	0.81	3.03	7.48	39.16	0.26	0.33	0.75	824.94
17	2.00	0.00	3.19	0.76	0.65	0.77	3.49	7.42	38.70	0.24	0.23	0.74	858.54
18	2.00	0.00	3.06	0.82	0.60	0.81	3.26	7.68	41.49	0.21	0.48	0.99	892.14
19	2.00	0.00	3.37	0.87	0.56	0.88	2.68	6.59	45.06	0.22	0.54	0.99	925.74
20	2.00	0.00	3.81	0.80	0.62	0.82	2.89	7.47	40.87	0.22	0.62	0.99	959.34
21	2.00	0.00	3.61	0.79	0.61	0.78	3.08	7.27	44.01	0.23	0.32	0.99	992.94
22	2.00	0.00	3.19	0.74	0.64	0.81	3.59	8.22	37.35	0.21	0.63	0.99	1026.54
23	2.00	0.00	3.72	0.84	0.62	0.81	2.96	6.49	38.15	0.28	0.26	0.99	1060.14
24	2.00	0.00	3.65	0.80	0.61	0.78	2.86	7.11	44.22	0.22	0.46	1.00	1093.74
25	2.00	0.00	3.30	0.82	0.60	0.84	3.24	7.28	40.02	0.24	0.33	0.99	1127.34
26	2.00	0.00	3.39	0.80	0.62	0.83	3.03	7.57	37.47	0.24	0.53	0.99	1160.94
27	2.00	0.00	3.77	0.79	0.63	0.77	2.91	7.22	41.92	0.23	0.50	0.99	1194.54
28	2.00	0.00	3.37	0.73	0.59	0.81	2.96	6.86	45.42	0.20	0.55	0.99	1228.14
29	2.00	0.00	3.18	0.77	0.59	0.83	3.18	6.87	40.43	0.25	0.18	0.98	1261.74
30	2.00	0.00	3.40	0.80	0.63	0.85	3.53	7.01	38.70	0.21	0.48	0.99	1295.34
31	2.00	0.00	3.44	0.82	0.60	0.85	3.06	7.65	40.62	0.24	0.41	0.98	1328.94
32	2.00	0.00	4.36	0.81	0.63	0.76	2.68	7.11	43.33	0.23	0.54	1.00	1362.54
33	2.00	0.00	3.42	0.77	0.62	0.81	3.23	6.67	40.99	0.21	0.62	0.99	1396.14
34	2.00	0.00	3.27	0.75	0.62	0.75	3.13	6.78	40.30	0.24	0.40	0.99	1429.74
35	2.00	0.00	4.12	0.82	0.61	0.76	2.67	7.36	45.56	0.24	0.33	0.99	1463.34
36	2.00	0.00	3.98	0.83	0.54	0.83	2.33	6.74	54.22	0.20	0.38	0.86	1496.94
37	2.00	0.00	3.87	0.79	0.58	0.73	2.56	7.39	51.83	0.21	0.33	0.20	1530.54
38	2.00	0.00	3.77	0.79	0.56	0.84	2.50	6.62	44.96	0.25	0.40	0.20	1564.14
39	2.00	0.00	3.81	0.85	0.60	0.82	3.07	6.00	44.54	0.20	0.53	0.19	1597.74

********** SUMMARY DATA **********

SUBJECT: E DATE: 40672 RUN: E4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.37	0.66	0.70	0.66	3.41	7.61	40.21	0.22	0.45	0.21	271.02
2	1.59	0.00	3.40	0.68	0.66	0.78	3.42	7.33	39.43	0.20	0.73	0.20	304.62
3	2.00	0.00	3.67	0.74	0.72	0.75	3.72	7.51	36.15	0.17	1.09	0.20	338.22
4	2.00	0.00	2.99	0.70	0.64	0.78	4.08	8.12	38.04	0.15	1.17	0.20	371.82
5	2.00	0.00	3.24	0.73	0.63	0.79	3.47	7.43	39.09	0.20	0.65	0.20	405.42
6	2.00	0.00	4.20	0.77	0.63	0.76	2.49	7.37	42.62	0.21	0.75	0.29	439.02
7	2.00	0.00	5.26	0.64	0.88	0.50	2.84	7.01	36.07	0.26	0.61	1.09	472.62
8	2.00	0.00	4.27	0.48	0.85	0.38	2.72	7.12	36.18	0.27	0.58	1.87	506.22
9	2.00	0.00	4.14	0.68	0.86	0.44	3.13	7.57	42.62	0.22	0.45	1.86	539.82
10	2.00	0.00	4.00	0.63	0.92	0.47	3.41	6.82	33.85	0.26	0.32	1.86	573.42
11	2.00	0.00	3.48	0.41	0.91	0.37	4.47	7.71	36.34	0.19	0.36	1.86	607.02
12	2.00	0.00	4.75	0.37	1.03	0.37	3.73	7.27	32.59	0.18	1.20	1.85	640.62
13	2.00	0.00	5.66	0.55	0.94	0.38	2.65	6.68	27.19	0.32	0.67	1.86	674.22
14	2.00	0.00	4.89	0.60	1.02	0.40	3.21	7.24	31.50	0.24	0.82	1.86	707.82
15	2.00	0.00	4.81	0.41	1.02	0.33	3.32	5.48	32.83	0.25	0.58	1.84	741.42
16	2.00	0.00	6.01	0.61	0.96	0.41	2.79	7.74	36.89	0.28	0.43	1.85	775.02
17	2.00	0.00	5.59	0.54	0.93	0.38	2.37	6.24	41.97	0.22	0.74	1.85	808.62
18	2.00	0.00	5.40	0.36	0.85	0.43	3.20	7.80	39.55	0.25	0.29	1.48	842.22
19	2.00	0.00	4.53	0.46	0.84	0.52	3.36	6.18	32.34	0.24	0.64	0.51	875.82
20	2.00	0.00	3.73	0.64	0.74	0.66	3.72	6.39	29.82	0.25	0.40	0.98	909.42
21	2.00	0.00	3.59	0.63	0.64	0.79	3.49	6.47	35.04	0.23	0.53	0.98	943.02
22	2.00	0.00	4.66	0.44	0.80	0.49	2.97	6.84	39.64	0.25	0.40	0.99	976.62
23	2.00	0.00	3.84	0.69	0.65	0.69	2.75	7.11	37.47	0.26	0.59	0.99	1010.22
24	2.00	0.00	3.90	0.70	0.75	0.77	3.44	6.93	27.77	0.24	0.87	0.98	1043.82
25	2.00	0.00	3.91	0.78	0.63	0.74	2.72	6.58	43.25	0.25	0.39	0.99	1077.42
26	2.00	0.00	3.91	0.70	0.71	0.73	3.45	6.47	34.91	0.21	0.77	0.99	1111.02
27	2.00	0.00	3.73	0.57	0.75	0.69	3.89	7.55	32.50	0.18	1.11	0.98	1144.62
28	2.00	0.00	4.00	0.69	0.75	0.69	3.39	6.61	32.70	0.22	0.84	0.98	1178.22
29	2.00	0.00	3.71	0.71	0.69	0.72	3.27	7.43	47.23	0.15	0.80	0.98	1211.82
30	2.00	0.00	4.13	0.70	0.72	0.64	3.60	7.14	49.00	0.13	0.89	0.98	1245.42
31	2.00	0.00	3.80	0.70	0.67	0.78	2.94	7.14	32.40	0.28	0.56	0.98	1279.02
32	2.00	0.00	4.19	0.68	0.71	0.70	3.26	5.84	35.61	0.25	0.40	0.99	1312.62
33	2.00	0.00	4.50	0.60	0.73	0.67	3.12	6.05	34.99	0.27	0.37	0.98	1346.22
34	2.00	0.00	4.90	0.60	0.83	0.61	3.11	5.67	30.23	0.28	0.50	0.98	1379.82
35	2.00	0.00	4.61	0.52	0.69	0.67	2.92	5.06	37.11	0.28	0.34	0.98	1413.42
36	2.00	0.00	4.16	0.65	0.70	0.66	2.91	7.65	39.60	0.24	0.53	0.98	1447.02
37	2.00	0.00	5.04	0.64	0.68	0.68	2.55	6.12	41.14	0.29	0.30	0.98	1480.62
38	2.00	0.00	4.35	0.67	0.69	0.68	2.77	7.67	39.50	0.19	0.99	0.97	1514.22
39	2.00	0.00	4.61	0.53	0.63	0.70	2.60	7.07	42.51	0.29	0.18	0.47	1547.82
40	2.00	0.00	4.46	0.53	0.71	0.67	2.71	6.29	27.78	0.28	0.87	0.19	1581.42

********** SUMMARY DATA **********

SUBJECT: F DATE: 40672 RUN: F4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	6.06	0.56	0.56	0.81	2.34	8.26	52.87	0.20	0.43	0.20	335.36
2	1.36	0.00	4.82	0.77	0.73	0.51	2.68	6.97	54.40	0.21	0.17	0.19	368.96
3	2.00	0.00	4.74	0.78	0.50	0.60	1.83	7.13	58.57	0.22	0.27	0.19	402.56
4	2.00	0.00	6.03	0.43	0.62	0.54	2.18	7.37	61.69	0.19	0.18	0.21	436.16
5	2.00	0.00	6.96	0.32	0.77	0.42	2.09	6.19	55.46	0.21	0.34	1.05	469.76
6	2.00	0.00	6.02	0.36	0.94	0.38	2.75	6.81	34.83	0.24	0.79	2.09	503.36
7	2.00	0.00	5.38	0.47	0.94	0.34	2.89	7.18	40.96	0.28	0.15	2.92	536.96
8	2.00	0.00	7.01	0.60	0.84	0.29	1.72	5.41	54.93	0.28	0.23	2.92	570.56
9	2.00	0.00	7.84	0.65	0.78	0.28	1.22	9.58	68.47	0.09	0.33	2.91	604.16
10	2.00	0.00	5.14	0.46	0.98	0.33	2.72	7.00	43.15	0.18	0.90	2.91	637.76
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.90	671.36
12	0.55	0.00	6.13	0.78	0.87	0.44	2.37	6.21	47.37	0.21	0.59	2.91	721.14
13	1.71	0.00	8.11	0.45	0.95	0.23	1.28	8.55	55.75	-0.64	1.83	2.88	754.74
14	2.00	0.00	6.53	0.62	0.78	0.36	1.90	6.99	56.64	0.20	0.39	1.87	788.34
15	2.00	0.00	4.99	0.58	0.61	0.60	2.11	7.94	59.36	0.17	0.35	0.82	821.94
16	2.00	0.00	6.20	0.59	0.71	0.62	2.17	7.43	40.41	0.26	0.66	0.66	855.54
17	2.00	0.00	5.16	0.35	0.57	0.64	3.10	5.98	63.97	0.10	0.41	0.98	889.14
18	2.00	0.00	6.32	0.41	0.69	0.63	2.51	6.76	44.41	0.27	0.27	0.98	922.74
19	2.00	0.00	6.85	0.52	0.80	0.41	2.08	9.15	53.14	0.21	0.43	0.98	956.34
20	2.00	0.00	5.03	0.41	0.80	0.52	3.19	7.13	42.88	0.20	0.56	0.98	989.94
21	2.00	0.00	4.70	0.54	0.81	0.50	3.04	6.31	35.92	0.28	0.29	0.98	1023.54
22	2.00	0.00	7.39	0.36	0.64	0.57	1.90	8.01	50.43	0.23	0.49	1.08	1057.14
23	2.00	0.00	7.39	0.27	0.72	0.34	1.87	6.55	93.46	0.01	-0.16	0.98	1090.74
24	2.00	0.00	8.74	0.35	0.81	0.38	3.29	8.13	52.22	0.23	-0.27	0.98	1124.34
25	2.00	0.00	4.34	0.50	0.80	0.42	2.52	6.98	40.66	0.31	0.23	0.99	1157.94
26	2.00	0.00	6.19	0.75	0.64	0.61	1.91	6.33	52.82	0.22	0.43	0.98	1191.54
27	2.00	0.00	6.10	0.38	0.91	0.38	2.86	7.43	40.75	0.28	0.14	0.98	1225.14
28	2.00	0.00	5.64	0.25	0.80	0.41	3.05	6.93	61.43	0.09	0.66	0.98	1258.74
29	2.00	0.00	7.19	0.40	0.65	0.63	1.88	4.68	53.75	0.20	0.49	0.98	1292.34
30	2.00	0.00	5.40	0.41	0.78	0.34	2.06	6.63	60.59	0.24	0.05	0.99	1325.94
31	2.00	0.00	6.48	0.64	0.56	0.59	2.03	6.70	73.60	0.10	0.18	0.98	1359.54
32	2.00	0.00	6.74	0.24	0.66	0.61	2.99	7.05	57.48	0.13	0.57	0.98	1393.14
33	2.00	0.00	7.19	0.37	0.59	0.64	2.18	8.44	48.54	0.31	0.12	0.98	1426.74
34	2.00	0.00	7.03	0.72	0.61	0.59	1.73	5.83	63.12	0.23	0.12	0.99	1460.34
35	2.00	0.00	12.08	0.35	0.48	0.83	1.29	8.09	59.56	0.30	0.18	0.90	1493.94
36	2.00	0.00	6.57	0.54	0.47	0.73	1.51	6.15	75.14	0.20	-0.06	0.26	1527.54
37	2.00	0.00	6.76	0.65	0.64	0.69	1.94	6.99	49.89	0.28	0.31	0.20	1561.14
38	2.00	0.00	7.51	0.39	0.57	0.48	1.83	6.86	68.97	0.08	0.39	0.20	1594.74
39	2.00	0.00	7.94	0.53	0.51	0.52	1.30	4.76	74.41	0.22	-0.02	0.20	1628.34

********** SUMMARY DATA **********

SUBJECT: G DATE: 40672 RUN: G4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/8 NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PHARH DEG	TAUH SEC	ALPHA R/S	GZ (G)	TIME SEC
1	0.50	0.00	3.90	0.90	0.52	0.89	2.41	9.78	56.22	0.17	0.42	0.20	305.10
2	1.68	0.00	3.47	0.81	0.54	0.88	2.99	9.14	56.52	0.14	0.48	0.19	338.70
3	2.00	0.00	2.96	0.81	0.55	0.87	3.14	8.60	48.21	0.19	0.41	0.20	372.30
4	2.00	0.00	3.08	0.80	0.56	0.86	3.30	8.70	47.60	0.19	0.33	0.19	405.90
5	2.00	0.00	3.11	0.69	0.62	0.74	3.68	7.31	45.54	0.16	0.65	0.32	439.50
6	2.00	0.00	2.99	0.47	0.65	0.59	3.31	8.35	50.94	0.19	0.23	1.11	473.10
7	2.00	0.00	3.16	0.64	0.66	0.63	3.24	8.68	44.06	0.24	0.05	1.86	506.70
8	2.00	0.00	2.90	0.75	0.65	0.67	3.54	8.73	46.79	0.17	0.50	1.84	540.30
9	2.00	0.00	3.63	0.66	0.68	0.62	3.17	8.62	46.42	0.18	0.56	1.84	573.90
10	2.00	0.00	3.02	0.72	0.65	0.66	3.26	8.21	50.88	0.16	0.49	1.85	607.50
11	2.00	0.00	2.96	0.77	0.66	0.65	3.38	8.54	46.81	0.18	0.50	1.85	641.10
12	2.00	0.00	3.40	0.71	0.66	0.65	3.15	8.30	61.06	0.09	0.68	1.87	674.70
13	2.00	0.00	3.01	0.70	0.67	0.66	3.35	7.77	44.14	0.20	0.46	1.84	708.30
14	2.00	0.00	3.56	0.76	0.67	0.62	3.38	7.71	43.81	0.22	0.20	1.89	741.90
15	2.00	0.00	3.01	0.84	0.68	0.72	3.73	8.00	38.35	0.22	0.26	1.87	775.50
16	2.00	0.00	3.42	0.68	0.67	0.53	2.82	8.04	54.07	0.19	0.27	1.86	809.10
17	2.00	0.00	2.96	0.73	0.65	0.74	3.77	8.63	41.95	0.13	1.30	1.51	842.70
18	2.00	0.00	3.41	0.71	0.60	0.73	3.06	7.81	47.37	0.22	0.26	0.51	876.30
19	2.00	0.00	3.43	0.82	0.58	0.88	3.06	9.04	44.32	0.19	0.62	0.99	909.90
20	2.00	0.00	3.40	0.78	0.57	0.87	3.13	9.08	43.91	0.20	0.53	0.98	943.50
21	2.00	0.00	2.89	0.83	0.54	0.89	3.39	8.49	49.13	0.18	0.35	0.98	977.10
22	2.00	0.00	3.30	0.84	0.57	0.85	3.03	8.80	48.94	0.19	0.41	0.99	1010.70
23	2.00	0.00	3.10	0.91	0.54	0.89	3.11	8.22	49.77	0.19	0.33	0.99	1044.30
24	2.00	0.00	2.77	0.79	0.56	0.86	3.16	8.52	47.28	0.19	0.42	0.98	1077.90
25	2.00	0.00	3.01	0.85	0.54	0.89	3.21	9.10	50.11	0.18	0.37	0.98	1111.50
26	2.00	0.00	3.26	0.77	0.55	0.87	3.35	8.76	54.84	0.14	0.52	0.99	1145.10
27	2.00	0.00	3.08	0.91	0.55	0.91	3.10	8.46	49.00	0.18	0.45	0.98	1178.70
28	2.00	0.00	3.21	0.84	0.55	0.84	2.99	8.29	51.77	0.18	0.35	0.98	1212.30
29	2.00	0.00	3.15	0.87	0.55	0.89	3.19	8.35	45.27	0.23	0.18	1.00	1245.90
30	2.00	0.00	2.89	0.76	0.55	0.84	3.43	7.78	45.66	0.22	0.10	0.98	1279.50
31	2.00	0.00	3.27	0.82	0.55	0.86	3.11	8.39	49.52	0.19	0.40	0.98	1313.10
32	2.00	0.00	3.45	0.79	0.52	0.87	2.87	8.20	59.00	0.17	0.14	0.98	1346.70
33	2.00	0.00	3.35	0.84	0.55	0.85	3.01	8.28	51.47	0.17	0.45	0.98	1380.30
34	2.00	0.00	3.48	0.73	0.56	0.83	2.79	6.30	46.14	0.22	0.41	0.99	1413.90
35	2.00	0.00	3.44	0.89	0.51	0.91	2.72	7.68	56.97	0.16	0.39	0.98	1447.50
36	2.00	0.00	2.96	0.93	0.55	0.91	3.11	8.30	47.74	0.17	0.62	0.98	1481.10
37	2.00	0.00	3.38	0.81	0.61	0.80	3.39	8.28	44.28	0.18	0.61	0.97	1514.70
38	2.00	0.00	3.28	0.83	0.63	0.75	3.49	8.73	45.69	0.18	0.51	0.45	1548.30
39	2.00	0.00	2.77	0.86	0.56	0.89	3.51	7.84	46.55	0.19	0.29	0.19	1581.90
40	2.00	0.00	3.14	0.85	0.53	0.90	3.43	7.89	45.75	0.21	0.18	0.19	1615.50

********** SUMMARY DATA **********

SUBJECT: H DATE: 40672 RUN: H4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSCH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.92	0.82	0.58	0.77	3.36	9.43	49.32	0.19	0.28	0.19	255.00
2	1.33	0.00	3.72	0.71	0.67	0.66	3.58	8.36	44.46	0.21	-0.19	0.18	288.60
3	2.00	0.00	3.47	0.76	0.64	0.72	3.96	8.53	43.21	0.18	0.40	0.20	322.20
4	2.00	0.00	3.16	0.79	0.60	0.80	3.19	8.39	45.93	0.21	0.36	0.19	355.80
5	2.00	0.00	3.08	0.81	0.58	0.81	3.47	8.74	47.56	0.19	0.23	0.20	389.40
6	2.00	0.00	3.30	0.71	0.63	0.85	3.73	8.15	41.76	0.18	0.66	0.19	423.00
7	2.00	0.00	4.57	0.41	0.79	0.30	2.51	7.69	66.05	0.16	0.04	0.64	456.60
8	2.00	0.00	3.12	0.53	0.82	0.46	4.50	7.05	28.20	0.20	0.66	1.66	490.20
9	2.00	0.00	3.37	0.72	0.77	0.57	4.18	8.04	33.87	0.18	1.02	2.68	523.80
10	2.00	0.00	3.46	0.71	0.79	0.60	3.88	8.56	31.45	0.13	2.08	2.91	557.40
11	2.00	0.00	3.74	0.50	0.76	0.52	3.37	7.78	38.89	0.28	-0.15	2.90	591.00
12	2.00	0.00	4.37	0.56	0.81	0.48	3.86	6.75	40.97	0.25	-0.36	2.92	624.60
13	2.00	0.00	3.58	0.55	0.83	0.46	3.62	7.09	39.06	0.21	0.46	2.91	658.20
14	2.00	0.00	3.61	0.63	0.77	0.55	3.73	6.61	38.25	0.21	0.41	2.90	691.80
15	2.00	0.00	3.64	0.68	0.85	0.56	3.81	7.78	35.51	0.19	0.92	2.91	725.40
16	2.00	0.00	4.14	0.60	0.93	0.49	3.88	7.22	30.43	0.20	1.04	2.72	759.00
17	2.00	0.00	4.15	0.46	1.01	0.41	4.49	7.98	30.80	0.16	1.34	1.69	792.60
18	2.00	0.00	3.38	0.67	0.77	0.62	3.65	8.43	34.50	0.24	0.37	0.71	826.20
19	2.00	0.00	3.25	0.69	0.76	0.56	3.58	8.08	41.26	0.21	0.42	0.71	859.80
20	2.00	0.00	2.93	0.56	0.78	0.52	5.16	9.92	35.33	0.12	1.71	0.99	893.40
21	2.00	0.00	3.04	0.64	0.72	0.62	4.28	8.03	34.59	0.17	0.98	0.99	927.00
22	2.00	0.00	2.79	0.76	0.74	0.64	4.12	8.76	38.01	0.15	1.18	1.00	960.60
23	2.00	0.00	2.75	0.67	0.73	0.58	3.87	9.03	42.35	0.15	0.97	0.99	994.20
24	2.00	0.00	3.88	0.63	0.71	0.64	3.53	8.63	45.29	0.20	0.28	0.99	1027.80
25	2.00	0.00	2.82	0.70	0.72	0.63	4.23	8.96	34.39	0.17	1.09	0.99	1061.40
26	2.00	0.00	3.20	0.78	0.71	0.63	3.45	8.15	41.50	0.24	0.09	1.00	1095.00
27	2.00	0.00	3.10	0.69	0.68	0.66	3.76	8.50	40.90	0.18	0.63	0.99	1128.60
28	2.00	0.00	2.96	0.69	0.69	0.61	4.01	7.37	42.15	0.22	-0.24	0.99	1162.20
29	2.00	0.00	3.40	0.71	0.68	0.60	3.20	8.15	53.05	0.15	0.55	0.98	1195.80
30	2.00	0.00	3.11	0.68	0.68	0.70	3.55	8.45	38.54	0.25	0.10	0.99	1229.40
31	2.00	0.00	3.01	0.79	0.63	0.72	3.27	8.29	48.79	0.21	0.16	0.99	1263.00
32	2.00	0.00	3.29	0.71	0.72	0.74	4.07	8.07	34.45	0.18	0.92	1.00	1296.60
33	2.00	0.00	2.78	0.80	0.67	0.75	3.87	8.88	37.34	0.14	1.51	0.98	1330.20
34	2.00	0.00	2.62	0.68	0.67	0.66	4.08	8.44	39.80	0.17	0.70	0.98	1363.80
35	2.00	0.00	3.50	0.75	0.75	0.60	4.21	8.35	35.38	0.17	0.92	1.00	1397.40
36	2.00	0.00	3.03	0.65	0.67	0.64	3.65	6.35	44.65	0.17	0.63	0.99	1431.00
37	2.00	0.00	3.34	0.66	0.68	0.66	3.42	8.84	50.34	0.16	0.46	0.99	1464.60
38	2.00	0.00	3.59	0.79	0.63	0.77	3.26	7.77	42.26	0.22	0.42	0.84	1498.20
39	2.00	0.00	3.39	0.76	0.65	0.64	3.21	8.38	50.27	0.21	0.05	0.20	1531.80

********** SUMMARY DATA **********

SUBJECT: I DATE: 40672 RUN: I 4 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	2.67	0.81	0.62	0.82	3.99	9.23	41.53	0.16	0.75		271.66
2	1.56	0.00	2.28	0.80	0.61	0.83	4.47	8.35	35.14	0.17	0.91		305.26
3	2.00	0.00	2.56	0.76	0.61	0.83	3.77	7.97	37.50	0.20	0.63		338.86
4	2.00	0.00	2.70	0.76	0.69	0.77	4.53	8.61	31.83	0.15	1.43		372.46
5	2.00	0.00	2.80	0.78	0.65	0.84	4.14	7.89	30.27	0.15	1.73		406.06
6	2.00	0.00	2.53	0.70	0.66	0.74	4.32	8.11	35.86	0.15	1.36		439.66
7	2.00	0.00	2.72	0.79	0.73	0.79	4.72	7.85	27.25	0.17	1.38		473.26
8	2.00	0.00	2.52	0.79	0.62	0.84	4.07	7.75	35.04	0.19	0.74		506.86
9	2.00	0.00	2.71	0.78	0.64	0.81	4.10	7.64	33.38	0.19	0.83		540.46
10	2.00	0.00	2.59	0.75	0.64	0.84	4.19	7.58	34.13	0.20	0.63		574.06
11	2.00	0.00	2.61	0.82	0.60	0.83	3.78	8.14	42.16	0.16	0.86		607.66
12	2.00	0.00	2.98	0.78	0.73	0.79	4.46	8.29	30.35	0.17	1.32		641.26
13	2.00	0.00	2.56	0.74	0.70	0.75	4.43	8.12	30.19	0.16	1.48		674.86
14	2.00	0.00	3.10	0.67	0.66	0.80	3.69	7.96	37.25	0.22	0.45		708.46
15	2.00	0.00	2.88	0.73	0.65	0.77	3.82	8.25	36.93	0.17	1.09	GZ = 1.00	742.06
16	2.00	0.00	3.20	0.79	0.68	0.83	3.98	7.82	38.09	0.19	0.52		775.66
17	2.00	0.00	2.73	0.81	0.67	0.82	4.27	8.10	31.62	0.16	1.35		809.26
18	2.00	0.00	2.96	0.76	0.67	0.79	3.95	8.15	32.57	0.16	1.40		842.86
19	2.00	0.00	3.07	0.66	0.59	0.73	3.39	8.38	55.48	0.17	0.11		876.46
20	2.00	0.00	2.57	0.77	0.65	0.78	4.31	7.83	35.22	0.20	0.45		910.06
21	2.00	0.00	3.06	0.72	0.65	0.82	3.60	7.90	40.13	0.21	0.40		943.66
22	2.00	0.00	3.20	0.71	0.61	0.80	3.31	8.25	44.43	0.17	0.74		977.26
23	2.00	0.00	2.51	0.76	0.64	0.76	4.38	8.49	37.30	0.16	1.05		1010.86
24	2.00	0.00	3.20	0.71	0.61	0.83	3.62	8.11	40.20	0.21	0.36		1044.46
25	2.00	0.00	2.99	0.72	0.63	0.82	4.00	7.89	38.39	0.19	0.50		1078.06
26	2.00	0.00	2.78	0.78	0.59	0.85	3.48	8.57	40.56	0.21	0.45		1111.66
27	2.00	0.00	3.02	0.79	0.61	0.84	3.56	8.08	40.25	0.21	0.41		1145.26
28	2.00	0.00	2.64	0.77	0.59	0.88	3.88	7.81	35.50	0.17	1.15		1178.86
29	2.00	0.00	3.20	0.81	0.61	0.85	3.57	8.01	41.90	0.19	0.60		1212.46
30	2.00	0.00	3.17	0.77	0.60	0.80	3.14	7.41	45.42	0.19	0.52		1246.06
31	2.00	0.00	2.83	0.84	0.63	0.86	3.73	7.68	33.83	0.23	0.49		1279.66
32	2.00	0.00	2.87	0.77	0.62	0.86	3.69	8.34	32.88	0.22	0.63		1313.26
33	2.00	0.00	2.96	0.82	0.65	0.83	4.05	7.59	35.76	0.20	0.56		1346.86
34	2.00	0.00	3.10	0.69	0.71	0.72	4.46	9.07	33.35	0.11	2.32		1380.46
35	2.00	0.00	2.94	0.73	0.64	0.82	3.50	7.41	35.03	0.20	0.92		1414.06
36	2.00	0.00	3.18	0.72	0.67	0.74	3.67	8.10	34.15	0.24	0.37		1447.66
37	2.00	0.00	2.87	0.71	0.65	0.79	3.89	8.01	36.21	0.16	1.16		1481.26
38	2.00	0.00	3.13	0.80	0.67	0.84	4.07	7.83	31.82	0.18	1.19		1514.86
39	2.00	0.00	3.33	0.64	0.62	0.82	3.66	7.50	37.19	0.22	0.44		1548.46

********** SUMMARY DATA **********

SUBJECT: A DATE: 50672 RUN: A5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.19	0.79	0.57	0.82	3.34	8.56	48.35	0.19	0.31		271.46
2	1.41	0.00	2.95	0.84	0.58	0.85	3.52	7.52	42.19	0.21	0.29		305.06
3	2.00	0.00	3.68	0.78	0.57	0.80	2.99	8.25	51.11	0.19	0.31		338.66
4	2.00	0.00	3.23	0.71	0.60	0.78	3.59	7.94	39.82	0.23	0.21		372.26
5	2.00	0.00	3.30	0.86	0.56	0.85	3.19	7.56	44.33	0.24	0.08		405.86
6	2.00	0.00	3.32	0.85	0.53	0.89	2.90	7.16	47.50	0.21	0.36		439.46
7	2.00	0.00	4.16	0.76	0.53	0.88	2.65	7.84	50.61	0.21	0.36		473.06
8	2.00	0.00	3.43	0.88	0.56	0.86	3.27	7.32	44.81	0.22	0.23		506.66
9	2.00	0.00	4.76	0.82	0.57	0.78	2.90	6.93	49.88	0.21	0.29		540.26
10	2.00	0.00	3.64	0.77	0.55	0.81	2.78	7.51	50.86	0.20	0.33		573.86
11	2.00	0.00	3.40	0.82	0.54	0.84	2.88	7.43	47.95	0.25	0.08		607.46
12	2.00	0.00	3.77	0.83	0.56	0.82	3.16	7.65	47.96	0.20	0.29		641.06
13	2.00	0.00	3.86	0.69	0.56	0.77	3.04	6.09	48.55	0.23	0.10		674.66
14	2.00	0.00	3.15	0.82	0.53	0.85	3.06	7.16	49.13	0.21	0.18		708.26
15	2.00	0.00	3.29	0.83	0.54	0.87	3.15	6.60	49.02	0.21	0.19		741.86
16	2.00	0.00	3.10	0.81	0.56	0.83	3.26	7.49	48.73	0.20	0.22		775.46
17	2.00	0.00	3.63	0.84	0.54	0.83	2.87	7.58	51.50	0.22	0.12		809.06
18	2.00	0.00	3.28	0.82	0.56	0.85	3.05	7.06	42.26	0.27	0.02		842.66
19	2.00	0.00	2.87	0.84	0.60	0.84	3.48	6.76	40.93	0.23	0.23	GZ = 1.00	876.26
20	2.00	0.00	3.18	0.85	0.57	0.85	3.24	7.59	41.62	0.24	0.24		909.86
21	2.00	0.00	3.06	0.79	0.61	0.82	3.66	6.89	35.91	0.25	0.12		943.46
22	2.00	0.00	4.13	0.82	0.55	0.79	2.94	7.71	50.53	0.22	0.09		977.06
23	2.00	0.00	3.07	0.80	0.59	0.83	3.70	7.24	37.33	0.25	-0.08		1010.66
24	2.00	0.00	3.56	0.84	0.53	0.85	2.89	7.24	54.86	0.17	0.35		1044.26
25	2.00	0.00	4.53	0.63	0.58	0.83	3.16	6.34	43.67	0.24	0.17		1077.86
26	2.00	0.00	3.38	0.77	0.60	0.79	3.29	7.33	41.41	0.24	0.23		1111.46
27	2.00	0.00	3.24	0.75	0.59	0.78	3.11	6.86	41.27	0.26	0.16		1145.06
28	2.00	0.00	3.46	0.79	0.59	0.82	2.98	6.60	42.16	0.22	0.50		1178.66
29	2.00	0.00	3.04	0.80	0.56	0.83	3.29	7.31	50.18	0.18	0.38		1212.26
30	2.00	0.00	3.19	0.84	0.56	0.86	3.07	7.49	43.38	0.22	0.47		1245.86
31	2.00	0.00	3.25	0.76	0.53	0.80	2.91	6.82	50.93	0.21	0.20		1279.46
32	2.00	0.00	3.46	0.85	0.56	0.81	2.91	7.32	45.35	0.24	0.25		1313.06
33	2.00	0.00	3.37	0.78	0.61	0.80	3.63	7.13	39.52	0.22	0.24		1346.66
34	2.00	0.00	3.53	0.74	0.58	0.80	3.41	7.11	41.99	0.25	-0.02		1380.26
35	2.00	0.00	3.42	0.76	0.59	0.83	3.42	7.31	41.47	0.22	0.34		1413.86
36	2.00	0.00	3.15	0.83	0.61	0.83	3.48	7.34	36.26	0.26	0.13		1447.46
37	2.00	0.00	3.49	0.76	0.60	0.77	3.53	6.24	42.24	0.22	0.24		1481.06
38	2.00	0.00	3.21	0.71	0.54	0.82	3.15	7.01	50.79	0.21	0.05		1514.66
39	2.00	0.00	3.94	0.74	0.61	0.76	3.17	6.78	46.00	0.21	0.36		1548.26
40	2.00	0.00	3.16	0.83	0.57	0.86	3.26	6.79	42.70	0.23	0.27		1581.86

********** SUMMARY DATA **********

SUBJECT: B DATE: 50672 RUN: B5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.27	0.85	0.51	0.88	3.26	9.88	58.55	0.15	0.19		281.06
2	0.73	0.00	3.35	0.84	0.56	0.84	3.06	9.11	53.05	0.18	0.31		314.66
3	1.79	0.00	3.13	0.91	0.53	0.93	3.06	8.91	48.28	0.20	0.37		348.26
4	2.00	0.00	4.14	0.88	0.50	0.91	2.46	9.41	60.88	0.17	0.25		381.86
5	2.00	0.00	3.28	0.88	0.53	0.88	2.93	8.29	55.74	0.16	0.42		415.46
6	2.00	0.00	3.13	0.89	0.54	0.90	3.02	8.91	47.80	0.21	0.30		449.06
7	2.00	0.00	3.58	0.88	0.52	0.88	2.76	8.96	51.69	0.24	0.02		482.66
8	2.00	0.00	3.68	0.94	0.53	0.92	2.57	9.13	51.77	0.20	0.42		516.26
9	2.00	0.00	3.76	0.92	0.51	0.93	2.52	8.41	54.50	0.21	0.25		549.86
10	2.00	0.00	3.73	0.86	0.52	0.89	2.68	9.38	54.77	0.19	0.27		583.46
11	2.00	0.00	3.85	0.84	0.51	0.88	2.26	9.54	56.63	0.18	0.38		617.06
12	2.00	0.00	3.35	0.88	0.53	0.89	2.92	9.61	52.59	0.18	0.36		650.66
13	2.00	0.00	3.04	0.91	0.55	0.91	3.37	8.42	45.29	0.21	0.29		684.26
14	2.00	0.00	3.59	0.88	0.53	0.91	2.91	8.69	48.74	0.23	0.18		717.86
15	2.00	0.00	3.61	0.83	0.54	0.81	2.92	9.56	55.44	0.18	0.21		751.46
16	2.00	0.00	3.20	0.81	0.57	0.84	3.18	8.41	47.33	0.22	0.17		785.06
17	2.00	0.00	3.51	0.77	0.57	0.82	2.93	8.03	51.79	0.19	0.36		818.66
18	2.00	0.00	3.60	0.89	0.58	0.87	3.00	8.02	44.36	0.22	0.45		852.26
19	2.00	0.00	3.73	0.89	0.54	0.86	2.87	9.70	53.16	0.18	0.33		885.86
20	2.00	0.00	3.48	0.83	0.58	0.80	3.05	8.58	49.08	0.20	0.31		919.46
21	2.00	0.00	3.20	0.86	0.58	0.85	3.03	8.31	43.87	0.23	0.36		953.06
22	2.00	0.00	3.86	0.83	0.54	0.84	2.63	7.07	54.31	0.20	0.29		986.66
23	2.00	0.00	3.78	0.88	0.53	0.85	2.46	8.33	54.87	0.20	0.31		1020.26
24	2.00	0.00	3.37	0.88	0.57	0.87	2.91	7.47	47.25	0.19	0.54		1053.86
25	2.00	0.00	3.12	0.90	0.53	0.86	2.90	7.93	53.15	0.20	0.19		1087.46
26	2.00	0.00	3.76	0.83	0.54	0.86	2.89	7.52	51.17	0.23	0.00		1121.06
27	2.00	0.00	4.04	0.88	0.54	0.88	2.73	8.69	49.71	0.20	0.41		1154.66
28	2.00	0.00	3.43	0.86	0.54	0.86	3.01	8.01	48.53	0.22	0.21		1188.26
29	2.00	0.00	3.61	0.87	0.55	0.86	2.91	7.15	49.79	0.20	0.34		1221.86
30	2.00	0.00	4.58	0.81	0.56	0.84	2.20	8.31	53.01	0.16	0.66		1255.46
31	2.00	0.00	3.21	0.82	0.57	0.84	3.37	7.03	47.49	0.19	0.37		1289.06
32	2.00	0.00	3.54	0.82	0.55	0.83	3.28	7.33	52.69	0.17	0.33		1322.66
33	2.00	0.00	3.82	0.80	0.56	0.82	2.54	6.75	54.46	0.15	0.58		1356.26
34	2.00	0.00	3.52	0.90	0.55	0.90	2.50	8.00	47.19	0.21	0.54		1389.86
35	2.00	0.00	4.65	0.77	0.52	0.78	2.17	7.77	62.81	0.19	0.14		1423.46
36	2.00	0.00	3.98	0.74	0.55	0.82	2.74	7.18	49.88	0.21	0.35		1457.06
37	2.00	0.00	3.31	0.90	0.53	0.87	2.77	7.84	51.58	0.20	0.32		1490.66
38	2.00	0.00	3.98	0.72	0.55	0.85	2.48	7.46	48.46	0.22	0.46		1524.26
39	2.00	0.00	4.55	0.86	0.57	0.88	2.28	7.03	42.72	0.25	0.58		1557.86

GZ = 1.00

********** SUMMARY DATA **********

SUBJECT: C DATE: 50672 RUN: C5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.30	0.00	3.59	0.89	0.55	0.86	2.75	9.18	51.52	0.19	0.41		272.50
2	1.43	0.00	3.34	0.79	0.60	0.76	2.62	8.55	50.44	0.16	0.70		306.10
3	2.00	0.00	4.50	0.94	0.55	0.90	2.18	7.48	48.44	0.20	0.65		339.70
4	2.00	0.00	4.89	0.84	0.59	0.83	2.38	7.69	50.40	0.18	0.62		373.30
5	2.00	0.00	4.41	0.75	0.61	0.80	2.61	7.86	44.79	0.21	0.63		406.90
6	2.00	0.00	5.16	0.87	0.59	0.85	2.00	6.53	45.92	0.19	0.77		440.50
7	2.00	0.00	4.55	0.80	0.60	0.80	2.37	7.03	49.99	0.17	0.70		474.10
8	2.00	0.00	4.43	0.83	0.57	0.84	2.44	8.39	48.42	0.21	0.50		507.70
9	2.00	0.00	3.76	0.89	0.58	0.85	2.73	8.78	48.55	0.21	0.45		541.30
10	2.00	0.00	4.12	0.81	0.62	0.79	2.68	8.14	46.00	0.20	0.60		574.90
11	2.00	0.00	3.62	0.79	0.53	0.79	2.56	7.18	60.99	0.15	0.32		608.50
12	2.00	0.00	3.26	0.85	0.57	0.82	2.95	7.92	51.05	0.19	0.34		642.10
13	2.00	0.00	3.33	0.85	0.56	0.83	3.03	8.03	47.65	0.20	0.38		675.70
14	2.00	0.00	4.02	0.87	0.55	0.89	2.58	7.75	48.99	0.21	0.46		709.30
15	2.00	0.00	4.05	0.85	0.59	0.84	2.98	8.25	50.45	0.17	0.50		742.90
16	2.00	0.00	3.53	0.85	0.55	0.86	2.82	7.23	51.02	0.19	0.43		776.50
17	2.00	0.00	4.28	0.87	0.54	0.88	2.41	8.14	52.46	0.19	0.48		810.10
18	2.00	0.00	3.90	0.86	0.55	0.84	2.59	7.99	54.71	0.17	0.48		843.70
19	2.00	0.00	3.94	0.86	0.57	0.87	2.66	7.07	47.42	0.21	0.46		877.30
20	2.00	0.00	4.52	0.78	0.56	0.86	2.67	7.68	49.57	0.21	0.37		910.90
21	2.00	0.00	4.40	0.91	0.58	0.88	2.44	7.78	44.99	0.22	0.62		944.50
22	2.00	0.00	4.18	0.77	0.54	0.82	2.40	7.78	50.95	0.25	0.22		978.10
23	2.00	0.00	4.67	0.76	0.56	0.82	2.34	7.19	52.76	0.20	0.43		1011.70
24	2.00	0.00	4.25	0.76	0.54	0.82	2.40	6.55	52.03	0.22	0.30		1045.30
25	2.00	0.00	4.45	0.89	0.52	0.89	2.11	7.32	56.64	0.17	0.49		1078.90
26	2.00	0.00	5.28	0.80	0.49	0.86	2.03	7.94	65.64	0.16	0.22		1112.50
27	2.00	0.00	3.96	0.90	0.56	0.90	2.56	6.98	47.03	0.24	0.38		1146.10
28	2.00	0.00	4.15	0.90	0.53	0.91	2.37	6.87	50.99	0.21	0.44		1179.70
29	2.00	0.00	4.07	0.81	0.48	0.85	2.14	7.65	64.70	0.13	0.36		1213.30
30	2.00	0.00	4.47	0.80	0.58	0.77	2.31	7.44	47.64	0.25	0.36		1246.90
31	2.00	0.00	4.03	0.69	0.56	0.79	2.59	6.98	55.94	0.17	0.42		1280.50
32	2.00	0.00	4.91	0.83	0.56	0.85	2.15	7.21	49.47	0.23	0.45		1314.10
33	2.00	0.00	4.05	0.84	0.54	0.90	2.30	6.28	49.39	0.23	0.43		1347.70
34	2.00	0.00	4.78	0.86	0.52	0.91	2.21	6.24	52.94	0.20	0.46		1381.30
35	2.00	0.00	4.26	0.84	0.53	0.87	2.24	7.49	52.49	0.21	0.41		1414.90
36	2.00	0.00	4.04	0.87	0.57	0.88	2.55	7.19	47.77	0.19	0.63		1448.50
37	2.00	0.00	3.96	0.85	0.58	0.90	2.82	7.81	47.85	0.19	0.58		1482.10
38	2.00	0.00	5.69	0.79	0.50	0.77	1.60	6.77	66.02	0.09	0.43		1515.70
39	2.00	0.00	4.82	0.90	0.50	0.86	1.87	7.01	55.41	0.24	0.28		1549.30
40	2.00	0.00	5.38	0.78	0.55	0.82	1.94	7.83	54.06	0.16	0.61		1582.90

GZ = 1.00

********** SUMMARY DATA **********

SUBJECT: D DATE: 50672 RUN: D5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.20	0.90	0.54	0.89	3.07	8.39	48.12	0.22	0.20		271.88
2	1.17	0.00	3.28	0.90	0.56	0.87	3.04	7.30	46.15	0.22	0.33		305.48
3	2.00	0.00	3.56	0.94	0.56	0.92	2.92	7.64	45.64	0.21	0.45		339.08
4	2.00	0.00	3.83	0.89	0.55	0.90	2.63	6.37	45.87	0.23	0.44		372.68
5	2.00	0.00	3.65	0.87	0.58	0.88	2.82	7.51	42.51	0.21	0.67		406.28
6	2.00	0.00	3.76	0.89	0.55	0.88	2.55	7.20	50.53	0.18	0.59		439.88
7	2.00	0.00	3.78	0.92	0.53	0.88	2.73	7.55	49.05	0.24	0.12		473.48
8	2.00	0.00	4.93	0.87	0.51	0.91	2.07	6.94	53.21	0.19	0.51		507.08
9	2.00	0.00	5.20	0.80	0.56	0.82	2.42	7.36	47.76	0.27	0.21		540.68
10	2.00	0.00	4.46	0.77	0.58	0.83	2.55	7.19	44.00	0.25	0.42		574.28
11	2.00	0.00	4.92	0.79	0.56	0.87	2.24	7.01	48.81	0.22	0.50		607.88
12	2.00	0.00	4.12	0.77	0.57	0.86	2.52	7.70	44.79	0.25	0.43		641.48
13	2.00	0.00	3.27	0.87	0.55	0.92	2.86	7.07	41.17	0.23	0.54		675.08
14	2.00	0.00	3.75	0.91	0.52	0.91	2.64	7.21	48.53	0.25	0.18		708.68
15	2.00	0.00	4.24	0.87	0.55	0.86	2.55	6.93	46.49	0.25	0.28		742.28
16	2.00	0.00	4.62	0.75	0.54	0.72	2.24	7.25	68.23	0.09	0.39		775.88
17	2.00	0.00	4.68	0.69	0.59	0.84	2.80	7.12	44.19	0.25	0.28		809.48
18	2.00	0.00	4.11	0.85	0.59	0.84	2.68	6.62	42.10	0.24	0.51		843.08
19	2.00	0.00	4.60	0.86	0.55	0.88	2.37	7.38	50.79	0.22	0.40		876.68
20	2.00	0.00	4.37	0.80	0.58	0.79	2.51	7.33	49.57	0.20	0.50		910.28
21	2.00	0.00	4.51	0.65	0.50	0.81	2.17	6.25	56.27	0.21	0.31		943.88
22	2.00	0.00	4.17	0.76	0.62	0.85	2.85	6.08	36.92	0.27	0.45		977.48
23	2.00	0.00	4.10	0.83	0.58	0.86	2.48	6.67	42.99	0.24	0.58		1011.08
24	2.00	0.00	4.02	0.72	0.54	0.75	2.53	6.59	57.29	0.19	0.23		1044.68
25	2.00	0.00	5.43	0.73	0.52	0.89	2.04	6.77	54.36	0.25	0.24		1078.28
26	2.00	0.00	3.76	0.85	0.58	0.82	2.85	6.96	48.92	0.18	0.57		1111.88
27	2.00	0.00	4.11	0.75	0.57	0.76	2.62	8.58	51.41	0.21	0.35		1145.48
28	2.00	0.00	4.07	0.87	0.56	0.88	2.48	6.67	43.83	0.25	0.44		1179.08
29	2.00	0.00	4.37	0.86	0.57	0.88	2.43	6.26	46.37	0.21	0.63		1212.68
30	2.00	0.00	4.62	0.82	0.56	0.85	2.33	6.42	46.88	0.25	0.42		1246.28
31	2.00	0.00	5.44	0.85	0.52	0.89	1.89	7.64	48.94	0.23	0.52		1279.88
32	2.00	0.00	5.40	0.67	0.55	0.73	1.97	7.01	55.74	0.29	0.05		1313.48
33	2.00	0.00	4.13	0.89	0.55	0.90	2.40	7.37	47.58	0.21	0.58		1347.08
34	2.00	0.00	4.23	0.72	0.58	0.79	2.37	6.62	46.18	0.24	0.48		1380.68
35	2.00	0.00	6.26	0.81	0.54	0.83	1.96	6.44	55.43	0.22	0.33		1414.28
36	2.00	0.00	3.95	0.89	0.55	0.90	2.49	6.43	46.15	0.22	0.52		1447.88
37	2.00	0.00	5.41	0.85	0.58	0.80	2.15	5.24	47.64	0.25	0.43		1481.48
38	2.00	0.00	3.95	0.73	0.54	0.89	2.67	7.46	50.79	0.17	0.62		1515.08
39	2.00	0.00	3.38	0.78	0.57	0.83	3.10	7.41	45.17	0.22	0.32		1548.68

GZ = 1.00

********** SUMMARY DATA **********

SUBJECT: E DATE: 50672 RUN: E5 SEGMENT:

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.69	0.92	0.52	0.93	2.80	8.70	52.68	0.19	0.32		286.28
2	1.59	0.00	4.02	0.86	0.52	0.89	2.66	8.23	55.85	0.19	0.22		319.88
3	2.00	0.00	3.66	0.84	0.54	0.89	2.86	8.22	49.60	0.22	0.19		353.48
4	2.00	0.00	3.36	0.92	0.52	0.90	2.78	8.14	53.30	0.20	0.21		387.08
5	2.00	0.00	3.99	0.89	0.50	0.93	2.39	8.05	55.75	0.20	0.26		420.68
6	2.00	0.00	3.84	0.90	0.51	0.91	2.58	9.12	56.73	0.18	0.33		454.28
7	2.00	0.00	4.21	0.94	0.50	0.93	2.33	7.75	55.98	0.21	0.25		487.88
8	2.00	0.00	4.09	0.81	0.54	0.88	2.71	7.86	52.17	0.19	0.42		521.48
9	2.00	0.00	3.17	0.87	0.51	0.89	2.86	7.95	51.70	0.23	0.00		555.08
10	2.00	0.00	3.82	0.93	0.53	0.93	2.55	8.17	49.39	0.21	0.44		588.68
11	2.00	0.00	3.94	0.88	0.51	0.91	2.38	7.86	53.32	0.21	0.36		622.28
12	2.00	0.00	4.23	0.93	0.49	0.92	2.34	7.55	58.00	0.19	0.26		655.88
13	2.00	0.00	4.22	0.90	0.48	0.92	2.16	7.99	59.00	0.20	0.25		689.48
14	2.00	0.00	4.69	0.80	0.48	0.92	2.12	8.22	59.96	0.19	0.28	GZ = 1.00	723.08
15	2.00	0.00	4.24	0.86	0.51	0.90	2.45	8.05	53.84	0.20	0.35		756.68
16	2.00	0.00	4.73	0.86	0.53	0.88	2.48	8.73	52.31	0.22	0.30	=	790.28
17	2.00	0.00	3.55	0.88	0.56	0.87	2.71	7.80	48.85	0.20	0.50	GZ	823.88
18	2.00	0.00	3.67	0.85	0.53	0.92	2.81	7.81	47.97	0.21	0.38	G	857.48
19	2.00	0.00	3.83	0.87	0.53	0.88	2.52	7.96	49.28	0.23	0.34		891.08
20	2.00	0.00	3.72	0.85	0.55	0.88	2.98	8.29	49.12	0.20	0.34		924.68
21	2.00	0.00	3.96	0.90	0.56	0.88	3.02	7.43	47.89	0.22	0.24		958.28
22	2.00	0.00	5.38	0.71	0.55	0.85	2.47	7.89	60.27	0.11	0.62		991.88
23	2.00	0.00	3.87	0.84	0.55	0.84	2.48	7.41	49.75	0.21	0.45		1025.48
24	2.00	0.00	3.93	0.83	0.56	0.86	2.50	7.86	47.97	0.20	0.59		1059.08
25	2.00	0.00	4.28	0.87	0.50	0.93	2.13	7.90	53.43	0.23	0.30		1092.68
26	2.00	0.00	3.92	0.87	0.54	0.90	2.93	8.15	50.71	0.20	0.29		1126.28
27	2.00	0.00	4.03	0.88	0.54	0.89	2.77	8.08	50.21	0.19	0.43		1159.88
28	2.00	0.00	4.10	0.94	0.53	0.93	2.37	6.65	47.08	0.24	0.40		1193.48
29	2.00	0.00	3.46	0.92	0.55	0.89	2.86	8.01	45.34	0.24	0.29		1227.08
30	2.00	0.00	4.28	0.82	0.53	0.89	2.59	7.47	50.39	0.21	0.41		1260.68
31	2.00	0.00	4.22	0.91	0.52	0.93	2.43	7.46	46.73	0.24	0.40		1294.28
32	2.00	0.00	4.53	0.90	0.54	0.90	2.63	8.22	48.34	0.23	0.33		1327.88
33	2.00	0.00	3.31	0.89	0.51	0.89	2.62	7.15	51.34	0.25	0.05		1361.48
34	2.00	0.00	3.92	0.86	0.50	0.92	2.37	7.28	51.59	0.23	0.30		1395.08
35	2.00	0.00	3.84	0.92	0.51	0.93	2.64	8.04	52.84	0.21	0.26		1428.68
36	2.00	0.00	3.69	0.86	0.54	0.86	2.71	7.62	51.26	0.21	0.29		1462.28
37	2.00	0.00	3.51	0.86	0.53	0.91	2.79	7.17	49.12	0.23	0.22		1495.88
38	2.00	0.00	4.57	0.85	0.58	0.86	2.56	6.13	45.79	0.22	0.51		1529.48
39	2.00	0.00	3.91	0.85	0.56	0.86	2.75	8.15	43.74	0.28	0.12		1563.08
40	2.00	0.00	3.96	0.80	0.52	0.88	2.51	6.60	51.99	0.21	0.35		1596.68

********** SUMMARY DATA **********

SUBJECT= F DATE= 50672 RUN= F5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PMARH DEG	TAUH SEC	ALPHA R/S	GZ (G)	TIME SEC
1	0.50	0.00	5.77	0.86	0.47	0.89	1.71	7.30	61.24	0.23	0.18		295.98
2	1.73	0.00	4.83	0.80	0.46	0.83	1.92	7.25	66.30	0.21	0.02		329.58
3	2.00	0.00	6.14	0.81	0.49	0.86	1.62	6.54	58.07	0.19	0.41		363.18
4	2.00	0.00	5.32	0.84	0.47	0.88	1.58	6.59	60.12	0.23	0.26		396.78
5	2.00	0.00	5.70	0.81	0.47	0.88	1.65	6.54	60.95	0.24	0.19		430.38
6	2.00	0.00	6.54	0.90	0.52	0.85	1.65	8.50	55.14	0.13	0.64		463.98
7	2.00	0.00	5.74	0.72	0.54	0.84	2.09	7.47	54.30	0.23	0.28		497.58
8	2.00	0.00	7.05	0.84	0.48	0.88	1.45	5.65	56.17	0.28	0.26		531.18
9	2.00	0.00	6.67	0.86	0.45	0.81	1.28	7.35	62.45	0.38	-0.01		564.78
10	2.00	0.00	7.71	0.70	0.44	0.82	1.32	8.19	67.93	0.22	0.12		598.38
11	2.00	0.00	6.28	0.79	0.50	0.88	1.81	5.79	53.36	0.26	0.31		631.98
12	2.00	0.00	6.89	0.86	0.56	0.84	1.90	6.97	58.60	0.11	0.63		665.58
13	2.00	0.00	4.85	0.77	0.52	0.81	2.14	6.91	54.80	0.24	0.20		699.18
14	2.00	0.00	6.50	0.78	0.47	0.84	1.60	7.49	58.17	0.27	0.21		732.78
15	2.00	0.00	6.26	0.88	0.49	0.86	1.55	6.00	58.37	0.19	0.40		766.38
16	2.00	0.00	6.26	0.82	0.43	0.75	1.22	7.18	72.47	0.17	0.12		799.98
17	2.00	0.00	6.17	0.76	0.49	0.78	1.58	5.97	60.69	0.25	0.17	1.00	833.58
18	2.00	0.00	6.69	0.83	0.44	0.80	1.26	7.34	62.44	0.45	-0.11	=	867.18
19	2.00	0.00	6.28	0.82	0.45	0.84	1.53	6.25	60.41	0.31	0.06	N	900.78
20	2.00	0.00	5.88	0.85	0.50	0.86	1.60	6.64	57.48	0.22	0.34	Z	934.38
21	2.00	0.00	6.59	0.75	0.50	0.82	1.43	7.61	55.81	0.18	0.48	G	967.98
22	2.00	0.00	5.30	0.76	0.52	0.83	1.96	7.64	54.60	0.23	0.31		1001.58
23	2.00	0.00	5.94	0.65	0.53	0.77	1.80	6.91	56.55	0.24	0.28		1035.18
24	2.00	0.00	7.35	0.71	0.49	0.86	1.57	4.77	55.51	0.27	0.27		1068.78
25	2.00	0.00	5.56	0.75	0.51	0.79	1.71	7.20	59.80	0.21	0.30		1102.38
26	2.00	0.00	8.42	0.73	0.42	0.93	1.40	4.46	65.33	0.37	-0.12		1135.98
27	2.00	0.00	6.22	0.84	0.51	0.79	1.63	6.83	59.07	0.24	0.25		1169.58
28	2.00	0.00	8.44	0.58	0.47	0.74	1.55	7.37	63.58	0.28	0.04		1203.18
29	2.00	0.00	9.11	0.58	0.59	0.78	1.94	6.49	58.42	0.25	0.14		1236.78
30	2.00	0.00	5.88	0.82	0.52	0.77	1.69	6.64	58.34	0.20	0.37		1270.38
31	2.00	0.00	4.75	0.82	0.55	0.87	2.19	5.03	46.17	0.28	0.36		1303.98
32	2.00	0.00	7.05	0.65	0.47	0.72	1.52	5.92	66.42	0.21	0.14		1337.58
33	2.00	0.00	5.82	0.77	0.48	0.78	1.65	6.05	64.67	0.25	0.03		1371.18
34	2.00	0.00	5.40	0.77	0.53	0.79	1.93	6.01	53.45	0.27	0.22		1404.78
35	2.00	0.00	4.72	0.78	0.60	0.70	2.52	6.26	50.86	0.24	0.23		1438.38
36	2.00	0.00	4.74	0.78	0.52	0.82	2.15	4.89	51.28	0.28	0.14		1471.98
37	2.00	0.00	4.73	0.80	0.50	0.82	1.91	7.46	58.54	0.23	0.22		1505.58
38	2.00	0.00	5.30	0.72	0.54	0.81	2.27	6.46	51.41	0.27	0.16		1539.18
39	2.00	0.00	5.84	0.54	0.56	0.71	2.20	7.85	56.61	0.18	0.40		1572.78

********** SUMMARY DATA **********

SUBJECT: G DATE: 50872 RUN: G5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PMARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	4.89	0.94	0.45	0.94	2.03	8.08	65.91	0.14	0.26		277.68
2	1.70	0.00	4.05	0.92	0.47	0.94	2.45	8.62	60.05	0.18	0.17		311.28
3	2.00	0.00	4.21	0.98	0.46	0.94	2.15	8.75	62.49	0.21	0.07		344.88
4	2.00	0.00	3.97	0.92	0.49	0.93	2.81	7.87	56.63	0.19	0.14		378.48
5	2.00	0.00	3.52	0.87	0.50	0.92	2.78	8.15	53.92	0.20	0.20		412.08
6	2.00	0.00	3.20	0.88	0.49	0.92	2.97	7.66	56.96	0.19	0.03		445.68
7	2.00	0.00	3.45	0.93	0.49	0.94	2.89	7.34	57.05	0.17	0.27		479.28
8	2.00	0.00	3.63	0.93	0.48	0.95	2.53	7.91	58.12	0.18	0.26		512.88
9	2.00	0.00	4.40	0.94	0.45	0.92	2.16	8.06	63.58	0.21	0.02		546.48
10	2.00	0.00	3.91	0.95	0.47	0.95	2.38	7.55	58.67	0.20	0.19		580.08
11	2.00	0.00	3.77	0.92	0.49	0.93	2.55	7.42	57.24	0.19	0.24		613.68
12	2.00	0.00	3.48	0.89	0.50	0.91	2.66	7.47	55.97	0.19	0.18		647.28
13	2.00	0.00	4.04	0.86	0.47	0.90	2.33	7.86	60.75	0.22	-0.02		680.88
14	2.00	0.00	3.37	0.83	0.50	0.89	2.92	7.07	53.08	0.23	-0.10	GZ = 1.00	714.48
15	2.00	0.00	4.44	0.78	0.47	0.88	2.41	7.60	62.57	0.21	-0.05		748.08
16	2.00	0.00	3.87	0.89	0.49	0.92	2.59	7.77	58.13	0.18	0.23		781.68
17	2.00	0.00	4.28	0.90	0.49	0.91	2.30	8.10	59.62	0.18	0.29		815.28
18	2.00	0.00	3.47	0.87	0.50	0.90	2.89	7.90	57.90	0.18	0.08		848.88
19	2.00	0.00	3.48	0.90	0.52	0.91	2.93	7.63	54.89	0.17	0.34		882.48
20	2.00	0.00	3.27	0.88	0.50	0.92	2.83	8.03	52.33	0.22	0.06		916.08
21	2.00	0.00	3.55	0.92	0.49	0.92	2.71	8.04	56.53	0.22	-0.00		949.68
22	2.00	0.00	3.88	0.88	0.48	0.92	2.37	6.53	60.43	0.17	0.26		983.28
23	2.00	0.00	4.12	0.90	0.48	0.91	2.38	8.13	58.41	0.19	0.25		1016.88
24	2.00	0.00	4.51	0.84	0.48	0.90	2.36	7.71	57.23	0.21	0.19		1050.48
25	2.00	0.00	4.57	0.91	0.47	0.92	2.14	7.58	58.06	0.23	0.13		1084.08
26	2.00	0.00	4.18	0.89	0.50	0.88	2.43	7.48	55.80	0.24	0.06		1117.68
27	2.00	0.00	4.17	0.91	0.47	0.93	2.28	7.28	58.30	0.24	-0.00		1151.28
28	2.00	0.00	4.12	0.87	0.50	0.88	2.72	7.47	53.67	0.22	0.09		1184.88
29	2.00	0.00	4.79	0.84	0.45	0.89	2.13	6.22	66.94	0.22	-0.12		1218.48
30	2.00	0.00	4.38	0.89	0.44	0.91	2.00	7.61	65.60	0.24	-0.10		1252.08
31	2.00	0.00	5.12	0.83	0.44	0.93	2.05	6.91	62.80	0.23	0.00		1285.68
32	2.00	0.00	4.95	0.91	0.42	0.87	1.86	7.25	66.85	0.30	-0.29		1319.28
33	2.00	0.00	4.76	0.81	0.48	0.91	2.21	7.41	59.52	0.20	0.18		1352.88
34	2.00	0.00	5.62	0.86	0.47	0.90	1.96	6.33	61.98	0.20	0.19		1386.48
35	2.00	0.00	4.50	0.81	0.49	0.83	2.25	7.86	59.12	0.25	-0.03		1420.08
36	2.00	0.00	4.40	0.84	0.47	0.90	2.36	6.91	59.42	0.22	0.06		1453.68
37	2.00	0.00	4.99	0.75	0.48	0.84	2.28	7.88	61.93	0.20	0.06		1487.28
38	2.00	0.00	4.52	0.89	0.50	0.87	2.37	7.50	60.34	0.19	0.18		1520.88
39	2.00	0.00	4.16	0.89	0.49	0.92	2.50	6.91	55.95	0.21	0.18		1554.48
40	2.00	0.00	3.57	0.92	0.51	0.93	2.71	7.41	51.80	0.22	0.20		1588.08

********** SUMMARY DATA **********

SUBJECT= H DATE= 50672 RUN= H5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/S NYCV=4 SEG START=

SEGMENT	LAMEAN	RMSEV	RMSEH	RHOE2H	RMSCH	RHOC2H	WCH	WUH	PHARH	TAUH	ALPHA	GZ	TIME
		DEG	DEG		N		R/S	R/S	DEG	SEC	R/S	(G)	SEC
1	0.50	0.00	3.06	0.73	0.53	0.79	3.31	9.81	54.14	0.18	0.07		267.74
2	0.87	0.00	2.99	0.88	0.56	0.85	3.54	9.05	51.69	0.16	0.37		301.34
3	2.00	0.00	3.15	0.91	0.52	0.86	3.01	9.50	53.65	0.22	-0.08		334.94
4	2.00	0.00	3.81	0.77	0.53	0.81	2.78	8.17	53.62	0.21	0.15		368.54
5	2.00	0.00	3.21	0.92	0.51	0.90	3.22	8.09	54.11	0.18	0.15		402.14
6	2.00	0.00	3.55	0.81	0.53	0.88	3.00	7.17	51.58	0.20	0.20		435.74
7	2.00	0.00	3.26	0.88	0.54	0.86	3.31	8.57	47.62	0.21	0.12		469.34
8	2.00	0.00	3.51	0.81	0.53	0.84	2.88	8.48	52.69	0.21	0.10		502.94
9	2.00	0.00	3.58	0.92	0.54	0.90	2.87	8.52	49.02	0.22	0.22		536.54
10	2.00	0.00	4.16	0.78	0.49	0.94	2.79	6.22	57.09	0.17	0.30		570.14
11	2.00	0.00	3.71	0.80	0.57	0.85	3.01	8.44	42.74	0.27	0.07		603.74
12	2.00	0.00	3.29	0.85	0.55	0.88	3.30	8.12	44.65	0.23	0.15		637.34
13	2.00	0.00	3.28	0.89	0.55	0.91	3.29	7.97	45.98	0.20	0.40		670.94
14	2.00	0.00	3.31	0.86	0.55	0.87	3.34	7.39	48.54	0.18	0.40	GZ = 1.00	704.54
15	2.00	0.00	2.83	0.84	0.55	0.85	3.50	8.37	46.08	0.20	0.18		738.14
16	2.00	0.00	3.03	0.89	0.52	0.85	2.86	7.80	55.58	0.18	0.25		771.74
17	2.00	0.00	3.63	0.84	0.53	0.88	3.05	6.29	51.72	0.18	0.33		805.34
18	2.00	0.00	3.37	0.85	0.53	0.88	3.04	7.56	50.83	0.19	0.29		838.94
19	2.00	0.00	3.43	0.82	0.54	0.82	3.08	7.23	51.66	0.19	0.27		872.54
20	2.00	0.00	4.19	0.71	0.53	0.78	2.84	7.20	53.91	0.20	0.15		906.14
21	2.00	0.00	3.80	0.87	0.57	0.74	2.80	8.04	52.54	0.21	0.18		939.74
22	2.00	0.00	3.68	0.82	0.56	0.83	3.02	7.59	46.77	0.23	0.19		973.34
23	2.00	0.00	3.07	0.91	0.51	0.90	3.20	8.39	51.40	0.20	0.10		1006.94
24	2.00	0.00	3.31	0.89	0.52	0.86	2.70	7.72	53.78	0.22	0.11		1040.54
25	2.00	0.00	3.71	0.88	0.53	0.85	2.94	7.52	51.69	0.21	0.11		1074.14
26	2.00	0.00	3.16	0.84	0.53	0.88	3.33	8.00	47.63	0.21	0.15		1107.74
27	2.00	0.00	3.33	0.82	0.55	0.89	3.57	8.17	45.59	0.20	0.17		1141.34
28	2.00	0.00	3.26	0.88	0.58	0.82	3.50	7.83	47.11	0.18	0.41		1174.94
29	2.00	0.00	2.98	0.83	0.57	0.83	3.86	7.71	41.59	0.17	0.67		1208.54
30	2.00	0.00	3.21	0.87	0.54	0.87	3.14	7.13	48.41	0.22	0.08		1242.14
31	2.00	0.00	3.15	0.84	0.57	0.82	3.35	8.10	45.19	0.22	0.16		1275.74
32	2.00	0.00	3.64	0.89	0.54	0.87	2.92	8.05	48.74	0.23	0.16		1309.34
33	2.00	0.00	3.61	0.86	0.57	0.83	2.96	7.45	44.33	0.26	0.10		1342.94
34	2.00	0.00	3.04	0.84	0.56	0.80	3.39	6.44	47.88	0.20	0.17		1376.54
35	2.00	0.00	3.47	0.87	0.53	0.87	3.12	7.99	51.29	0.19	0.22		1410.14
36	2.00	0.00	3.19	0.81	0.63	0.79	3.85	8.17	34.02	0.17	1.17		1443.74
37	2.00	0.00	3.46	0.83	0.55	0.85	3.16	7.74	45.44	0.24	0.07		1477.34
38	2.00	0.00	3.20	0.85	0.58	0.85	3.30	7.88	43.09	0.23	0.23		1510.94
39	2.00	0.00	3.43	0.78	0.59	0.85	3.52	6.73	37.39	0.24	0.22		1544.54

********** SUMMARY DATA **********

SUBJECT: I DATE: 50672 RUN: I 5 SEGMENT

CROSS-COUPLED TASK YCH= 20.00/8 NYCV=4 SEG. START=

SEGMENT	LAMEAN	RMSEV DEG	RMSEH DEG	RHOE2H	RMSCH N	RHOC2H	WCH R/S	WUH R/S	PHARH DEG	TAUH SEC	ALPHA R/S	GZ (0)	TIME SEC
1	0.50	0.00	2.63	0.85	0.55	0.87	3.68	10.38	49.51	0.17	0.31		296.88
2	0.67	0.00	2.38	0.75	0.60	0.84	4.23	9.80	38.56	0.15	1.08		330.48
3	1.94	0.00	2.65	0.86	0.57	0.88	4.02	9.12	43.31	0.16	0.64		364.08
4	2.00	0.00	2.59	0.80	0.61	0.89	4.24	8.32	33.80	0.18	0.99		397.68
5	2.00	0.00	2.61	0.84	0.62	0.88	4.14	8.06	31.83	0.17	1.35		431.28
6	2.00	0.00	2.72	0.69	0.66	0.80	4.42	8.10	29.51	0.18	1.11		464.88
7	2.00	0.00	2.57	0.75	0.63	0.81	4.03	8.86	35.27	0.13	1.75		498.48
8	2.00	0.00	2.43	0.68	0.62	0.83	4.43	8.29	33.86	0.18	0.83		532.08
9	2.00	0.00	3.26	0.63	0.65	0.84	4.21	8.12	32.59	0.17	1.28		565.68
10	2.00	0.00	2.54	0.66	0.60	0.81	4.26	8.35	37.31	0.16	1.01		599.28
11	2.00	0.00	2.66	0.88	0.64	0.87	4.47	8.27	31.38	0.18	0.98		632.88
12	2.00	0.00	2.46	0.78	0.63	0.83	4.52	8.48	37.51	0.17	0.64		666.48
13	2.00	0.00	2.70	0.72	0.62	0.79	4.53	8.58	37.40	0.17	0.66		700.08
14	2.00	0.00	2.80	0.73	0.61	0.87	3.91	7.96	35.79	0.17	1.14		733.68
15	2.00	0.00	2.47	0.84	0.61	0.86	4.00	8.61	33.40	0.16	1.33		767.28
16	2.00	0.00	3.06	0.77	0.62	0.87	3.89	8.48	35.37	0.16	1.24		800.88
17	2.00	0.00	2.97	0.71	0.60	0.85	4.25	7.92	36.98	0.19	0.54		834.48
18	2.00	0.00	2.62	0.68	0.60	0.86	4.36	8.13	32.92	0.17	1.10		868.08
19	2.00	0.00	2.69	0.80	0.62	0.85	4.35	7.96	33.61	0.18	0.91		901.68
20	2.00	0.00	2.70	0.63	0.61	0.81	3.97	8.05	39.26	0.18	0.64		935.28
21	2.00	0.00	2.57	0.76	0.63	0.87	4.32	8.13	31.71	0.17	1.28		968.88
22	2.00	0.00	2.66	0.76	0.66	0.85	4.70	8.20	28.64	0.16	1.40		1002.48
23	2.00	0.00	2.21	0.78	0.61	0.85	4.51	8.23	33.31	0.19	0.80		1036.08
24	2.00	0.00	2.58	0.79	0.62	0.84	4.16	8.51	37.39	0.16	0.97		1069.68
25	2.00	0.00	2.59	0.78	0.61	0.83	3.69	8.37	40.22	0.22	0.27		1103.28
26	2.00	0.00	2.36	0.84	0.60	0.85	4.38	8.06	36.26	0.17	0.78		1136.88
27	2.00	0.00	2.89	0.76	0.63	0.83	3.86	8.22	38.69	0.18	0.78		1170.48
28	2.00	0.00	3.08	0.60	0.67	0.77	4.26	8.54	36.17	0.14	1.54		1204.08
29	2.00	0.00	2.49	0.77	0.64	0.85	4.35	8.19	32.28	0.16	1.38		1237.68
30	2.00	0.00	2.58	0.83	0.61	0.88	3.72	7.76	32.73	0.26	0.17		1271.28
31	2.00	0.00	3.09	0.66	0.63	0.83	4.07	7.83	36.90	0.18	0.81		1304.88
32	2.00	0.00	2.97	0.82	0.66	0.82	4.42	7.50	28.58	0.19	0.95		1338.48
33	2.00	0.00	2.59	0.72	0.67	0.83	4.39	7.73	29.23	0.18	1.15		1372.08
34	2.00	0.00	2.97	0.82	0.61	0.87	3.62	8.44	36.19	0.23	0.35		1405.68
35	2.00	0.00	2.67	0.81	0.61	0.86	3.82	8.51	36.31	0.15	1.32		1439.28
36	2.00	0.00	2.59	0.69	0.64	0.80	4.22	8.09	33.96	0.18	0.89		1472.88
37	2.00	0.00	2.83	0.70	0.64	0.80	4.46	7.94	31.33	0.19	0.84		1506.48
38	2.00	0.00	2.70	0.79	0.62	0.83	4.12	8.31	34.98	0.15	1.44		1540.08
39	2.00	0.00	2.69	0.74	0.64	0.80	3.80	7.91	38.91	0.20	0.50		1573.68

GZ = 1.00

APPENDIX C

ANALYSIS OF VARIANCE TABLES

TABLE C-1

ANALYSIS OF VARIANCE, σ_{φ_e}

SOURCE OF VARIATION	2 G GROUP			3 G GROUP WITHOUT SUBJECT F		
	σ_{φ_e}			σ_{φ_e}		
	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
Bedrest (B)	1	0.8021	5.57*	1	0.2952	2.13NS
Profile Phase (P)	2	0.6241	0.90NS	2	0.0073	0.008NS
G Suit (G)	1	0.7638	0.80NS	1	0.0462	0.300NS
Subjects (S)	3	6.7246	46.73***	2	4.3799	31.60***
B × P	2	0.2437	0.96NS	2	0.1775	0.41NS
B × G	1	1.5105	2.68NS	1	0.8342	6.02*
B × S	3	0.0372	0.26NS	2	0.095	0.68NS
P × G	2	0.3051	1.34NS	2	0.3077	2.22NS
P × S	6	0.6889	4.79***	4	0.9320	6.72***
G × S	3	0.9515	6.61***	2	0.1538	1.09NS
B × P × G	2	0.0650	0.45NS	2	0.1172	0.845NS
B × P × S	6	0.2543	1.77NS	4	0.4336	3.13*
B × G × S	3	0.5641	3.92*	2	0.0523	0.377NS
P × G × S	6	0.2270	1.58NS	4	0.1063	0.767NS
B × P × G × S	6	0.0652	0.45NS	4	0.0986	0.711NS
Residual	144	0.1439		108	0.1386	
Residual Standard Deviation		0.38 deg			0.372 deg	
Overall Mean		3.695 deg			3.515 deg	

Significance Level: * = 0.05; ** = 0.01; *** = 0.001.

TABLE C-2

ANALYSIS OF VARIANCE, ρ_e^2

SOURCE OF VARIATION	2 G GROUP			3 G GROUP WITHOUT SUBJECT F		
	ρ_e^2			ρ_e^2		
	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
Bedrest (B)	1	0.0230	4.26*	1	0.0117	1.36NS
Profile Phase (P)	2	0.1529	27.3***	2	0.0961	6.16NS
G Suit (G)	1	0.0033	0.125NS	1	0.0097	3.03NS
Subjects (S)	3	0.2811	52.0***	2	0.1735	54.22***
B × P	2	0.0196	1.65NS	2	0.0133	3.166NS
B × G	1	0.0230	3.28	1	0.0084	0.72NS
B × S	3	0.0001	0.18NS	2	0.0086	2.69NS
P × G	2	0.0043	0.35NS	2	0.0197	1.32NS
P × S	6	0.0056	1.04NS	4	0.0156	4.87**
G × S	3	0.0264	4.89**	2	0.0010	0.312NS
B × P × G	2	0.0057	0.37NS	2	0.0036	0.23NS
B × P × S	6	0.0119	2.2*	4	0.0042	1.31NS
B × G × S	3	0.0070	1.296NS	2	0.0116	3.62*
P × G × S	6	0.0124	2.296*	4	0.0149	4.656**
B × P × S	6	0.0152	2.81*	4	0.0156	4.875**
Residual	144	0.0054		108	0.0032	
Residual Standard Deviation		0.073			0.056	
Overall Mean		0.697			0.739	

Significance Level: * = 0.05; ** = 0.01; *** = 0.001.

TABLE C-3

ANALYSIS OF VARIANCE, ω_c

SOURCE OF VARIATION	2 G GROUP			3 G GROUP WITHOUT SUBJECT F		
	ω_c			ω_c		
	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
Bedrest (B)	1	1.0092	10.7***	1	0.2492	2.01NS
Profile Phase (P)	2	1.6055	1.75NS	2	0.2856	0.24NS
G Suit (G)	1	0.6256	1.38NS	1	0.0895	0.67NS
Subjects (S)	3	1.8133	19.23***	2	11.5266	104.88***
B × P	2	0.0732	0.325NS	2	0.2039	0.445NS
B × G	1	0.0963	0.41NS	1	0.0150	0.094NS
B × S	3	0.0464	0.49NS	2	0.1239	1.13NS
P × G	2	0.4368	2.47NS	2	0.0616	0.56NS
P × S	6	0.9179	9.73***	4	1.1683	10.63***
G × S	3	0.4514	4.78**	2	0.1341	1.22NS
B × P × G	2	0.5578	4.10NS	2	0.1695	1.26NS
B × P × S	6	0.2251	2.39*	4	0.4572	4.16**
B × G × S	3	0.2347	2.49NS	2	0.1591	1.45NS
P × G × S	6	0.1764	1.87NS	4	0.0703	0.64NS
B × P × G × S	6	0.1359	1.44NS	4	0.1347	1.22NS
Residual	144	0.0943		108	0.1099	
Residual Standard Deviation rad/sec		0.307			0.331	
Overall Mean, rad/sec		3.275			3.36	

Significance Level: * = 0.05; ** = 0.01; *** = 0.001.

TABLE C-4

ANALYSIS OF VARIANCE, τ_e

SOURCE OF VARIATION	2 G GROUP			3 G GROUP WITHOUT SUBJECT F		
	τ_e			τ_e		
	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO	DEGREES OF FREEDOM	MEAN SQUARE	F RATIO
Bedrest (B)	1	0.0110	3.33NS	1	0.0000	0.00NS
Profile Phase (P)	2	0.0004	0.363NS	2	0.0035	1.94NS
G Suit (G)	1	0.0035	2.92NS	1	0.0016	1.51NS
Subjects (S)	3	0.0094	8.54***	2	0.0162	18.41***
B × P	2	0.00004	0.03NS	2	0.0011	0.604NS
B × G	1	0.0030	0.47NS	1	0.00047	0.534NS
B × S	3	0.0033	3.0*	2	0.0017	1.93NS
P × G	2	0.0002	0.13NS	2	0.00002	0.022NS
P × S	6	0.0011	1.0NS	4	0.0018	2.04NS
G × S	3	0.0012	1.09NS	2	0.00106	1.20NS
B × P × G	2	0.0002	0.11NS	2	0.00047	0.303NS
B × P × S	6	0.0014	1.27NS	4	0.00182	2.07NS
B × G × S	3	0.0064	5.82**	2	0.00007	0.08NS
P × G × S	6	0.0015	1.36NS	4	0.00039	0.44NS
B × P × G × S	6	0.0018	1.64NS	4	0.00155	1.76NS
Residual	144	0.0011		108	0.00088	
Residual Standard Deviation (sec)		0.033			0.029	
Overall Mean (sec)		0.209			0.202	

Significance Level: * = 0.05; ** = 0.01; *** = 0.001.

NASA-Langley, 1974