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COLOSSUS MEMO # 222

TO: Distribution
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SUBJECT: T6JOB for COLOSSUS 2C

A new erasable memory program has been designed to enable the astronaut to set the SIVB Injection Sequence bit from the CMC at T6 base time as a backup to the Saturn IU. T6JOB, as this program has been temporarily named, will be loaded into EBANK 7 as part of the E-Memory Kstart LOAD. It should be noted that the code is not restart protected and can not be repeated after a successful completion.

The program can be started from the ground by uplink, or by the astronaut. The way to start the program is as follows:

V 96 E to stop integration

V 25 N33 E + XXXXXE + XXXXXE + XXXXXE

Load three components of T6 base time
in hours, minutes, and centi-seconds.

V 25 N 26 E 26000 E 01513E 10067E

Load the priority and address of T6JOB

V 30 E (Initiate T6JOB)

The T6 base time can be uplinked by the ground into the double precision register, TIG, and the priority and address (2CADR) of T6JOB can be uplinked into the three registers of DSPTEM1.

After the V30E, V06N34 will appear on the DSKY, displaying the time to go until T6 base time (negative). This display will be updated once per second, counting down to the selected T6 base time.

At T6 base time, the SIVB Injection Sequence Start bit will be set in the CMC, and the Uplink Activity light on the DSKY will be set to notify the astronaut that this has happened. The V06N34 display will

continue, now displaying the positive time since T6 base time.

The SIVB start bit and the uplink activity light will remain on for 10 seconds,(unless KR button pressed). At this time, the bit will be reset, the light turned off, and a flashing V37 will appear on the DSKY. The astronaut then must select a new program and continue with his other activities.

- (1) V96 must be selected and the mode lights must show 00.
- (2) The following programs cannot be called prior to T6JOB: P17, P20, P22, P23, P30's, P40's, P60's, P70's.
- (3) To re-enter T6JOB (e.g., to change T6 base time) while T6JOB is running, do V96, then reselect T6JOB.

T6JOB	INIINT		E7,1513	00004
	EXTEND		E7,1514	00006
	DCA	TIG	E7,1515	31413
	DXCH	LONGTIME	E7,1516	53140
	EXTEND		E7,1517	00006
	DCS	TIME2	E7,1520	40025
	DAS	LONGTIME	E7,1521	21140
	TC	LONGCALL +1	E7,1522	05357
	ADRES	T6SET	E7,1523	01550
	BBCON	T6SET	E7,1524	10067
TGODSP	CCS	T6FLG	E7,1525	11573
	TC	GOTOPOOH	E7,1526	04106
	CA	1SEC	E7,1527	35055
	TC	TWIDDLE	E7,1530	05251
	ADRES	T6CNTDN	E7,1531	01543
	EXTEND		E7,1532	00006
	DCS	TIG	E7,1533	41413
	DXCH	DSPTM1	E7,1534	53046
	TC	PATCH	E7,1535	01574
	DAS	DSPTM1	E7,1537	21046
ENDPATCH	CA	V06N34SR	E7,1540	33300
	TC	BANKCALL	E7,1541	04676
	CADR	REGODSP	E7,1542	20707
	CA	PRI026	E7,1543	37663
T6CNTDN	TC	NOVAC	E7,1544	05150
	ADRES	TGODSP	E7,1545	01525
	BBCON	TGODSP	E7,1546	10067
	TC	TASKOVER	E7,1547	05340
T6SET	CA	BIT13	E7,1550	35017
	EXTEND		E7,1551	00006
	WOR	CHAN12	E7,1552	05012
	CA	BIT3	E7,1553	35031
	EXTEND		E7,1554	00006
	WOR	CHAN11	E7,1555	05011
	EXTEND		E7,1556	00006
	DCA	TIME2	E7,1557	30025
	DXCH	TEVENT	E7,1560	21337
	TC	FIXDELAY	E7,1561	05303
T6DT	DEC	1000	E7,1562	01750
T6RESET	CS	BIT13	E7,1563	45017

(see note)

TABLE 1

TABLE 1 continued -

	EXTEND		E7,1564	00006
	WAND	CHAN12	E7,1565	03012
	CS	BIT3	E7,1566	45031
EXTEND			E7,1567	00006
	WAND	CHAN11	E7,1570	03011
	INCR	T6FLG	E7,1571	25573
	TC	TASKOVER	E7,1572	05340
T6FLG	OCT	O	E7,1573	00000
PATCH	EXTEND		E7,1574	00006
	DCA	TIME2	E7,1575	30025
	TC	ENDPATCH	E7,1576	01537

NOTE: E7,1536 is skipped since this erasable is not available for the erasable program.