MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LINCOLN LABORATORY

Memorandum No. 2M-0343

To: Whirlwind I Users

From: Arthur A. Mathiasen

Subject: Whirlwind I Test Storage Modification

ABSTRACT

A modification is being made to the Whirlwind I Test Storage. The changes should affect very few programmers in any detrimental fashion. This memorandum contains the revised contents.

Signed AAM (bic)
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The following will be the contents of Test Storage as of 9 March 1959. The changes made should not affect any programs. If they do, this should be noted so that Test Storage may be set up correctly for operation of the program. This change has been made to facilitate new operations of the Utility System.

Register (decimal)	Register (octal)	Contents (octal)	WWI Instruction	Purpose
0	0	0.00000	si 0	
1	1	0.00001	si 1	
2	2	FF-2		
3	3	FF-3		
4	4	1.00065		Alternate FF-4
5	5	FF-5		
6	6	0.14174		Alternate FF-6
7	7	0.50002 (FF-6)	ta 2	Standard FF-6
8	10	0.34320	cf 320	
9	11	0.77777	sp 3777	
10	12	1.00005	ca 5	Block out/in
11	13	0.74002	sp 2	
12	14	1.00006	ca 6	Re-entry for block-out
13	15	0.20040	bo 40	
14	16	0.74004	sp 4	
15	17	0.00102	si 102	Block-in from MTO
16	20	1.00006	ca 6	Re-entry from block-in
17	21	0.10040	bi 40	
18	22	0.74004	sp 4	
19	23	0.14062		
20	24	0.40024 (FF-4)		Standard FF-4
21	25	0.33741		
22	26	1.00023	ca 23	
23	27	1.14024	su 24	Block-in of DG 7
24	30	0.74036	sp 36	
25	31	0.50003	ta 3	
26	32	1.00032	ca 32	Read-in
27	33	0.00707	si 707	
28	34	0.20032	bo 32	
29	35	1.14025	su 25	Block-in of DG 9
30	36	0.00703	si 703	
31	37	0.10036	bi 36	

The normal order of Flip Flops will be unchanged; i.e., FF-2 in 2, FF-3 in 3, FF-4 in 20 (24 octal), FF-5 in 5, FF-6 in 7. For purposes of running the Checker, the Flip Flops should be in numerical order: FF-2 in 2, FF-3 in 3, FF-4 in 4, FF-5 in 5, FF-6 in 6.

For your information, a new service is available. In particular, to block out from 40 (octal) to the drums, the Flip Flops should be in numerical order, Program Counter at 12 (octal), and Flip Flops set up as follows:

FF-2	si (1) 7 (1) 7	(Drum si)
FF-3	sp 14	
FF-4	si 0 | sp x	
FF-5	Drum Address	
FF-6	Number of registers	

I.e., FF-2 has the proper drum si.

To block in to 40 (octal), Flip Flops 2 and 3 should be:

FF-2	si (1) 7 (1) 3
FF-3	sp 20

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