

MULTICS STAFF BULLETIN-77

TO: Distribution
FROM: S. H. Webber
DATE: November 6, 1972
SUBJECT: Follow-On Integration Group Task List



TASK AREA Currently Needed Tasks

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
New 645 F assembler. Document how to use.	RFM	C	2/7 2/21	3/1 4/1	Done.	3
Document stack header and stack frame format.	SHW		12/1 12/1	2/22 3/10	Done.	1
Document call/push/return changeover strategy.	SHW		12/1 12/1	3/1 3/20	Done.	2
Document follow-on code compatibility. (For users.)	SHW		2/28 3/20	3/17 4/1	Done.	2
Document code sequences for call/push/return.	SHW		2/21 2/21	2/28 3/10	Done.	1
Convert hardcore to version II PL/I. Convert include files for alignment.	ALL	M	3/15		In progress.	
Estimate bulk store requirements. Will we have enough?	RBS SHW		6/12 6/14	6/19 6/21	Done.	
Design new signalling and crawlout mechanism. Document giving changes.	RJF VLV		3/28 3/6	3/27 4/3	Done.	4
Scan system to find what changes with new ring hardware.	RJF		2/28 3/6	3/27 3/27	Done.	
New object segment format for ALM. (New macro names.)	RJF		3/6 3/27	3/27 5/15	Done.	3

TASK AREA Currently Needed Tasks

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
Design ring alarm software, implement it.	SHW NIM	M	3/13	4/24 10/2	Done.	6
Convert linker to check for new type ALM programs. (Optional control-call to turn it off.)	CLJ	M	3/27 4/24	4/17 6/30	Done.	3
Remove alarm clock from system.	RJF		12/1 12/1	2/28 3/17	Done.	0
Figure out how we can get MST's to Phoenix.	RBS DMW (DRV)		3/6 4/15	4/3 5/19	Done.	
Do anything necessary to get MST's to Phoenix.	DMW	C	3/6 4/15	4/3 7/3	Done.	8
Implement new stack header and virtual clock.	WSS		2/14 2/28	3/13 4/10	Done.	4
How to use bulk store on service with 645 drum?	RBS		4/24	5/8	Done. (Use drum as secondary storage probably.)	2
Write Multics bulk store dim; incorporate into page control.	RBS		4/17 5/8	5/8 5/20	Done.	3
Checkout Bulk Store DIM for Multics.		C	4/17 7/1	5/8 10/10	Done.	
Install Bulk Store on Multics.		C	9/1		When confidence achieved.	

TASK AREA Currently Needed Tasks

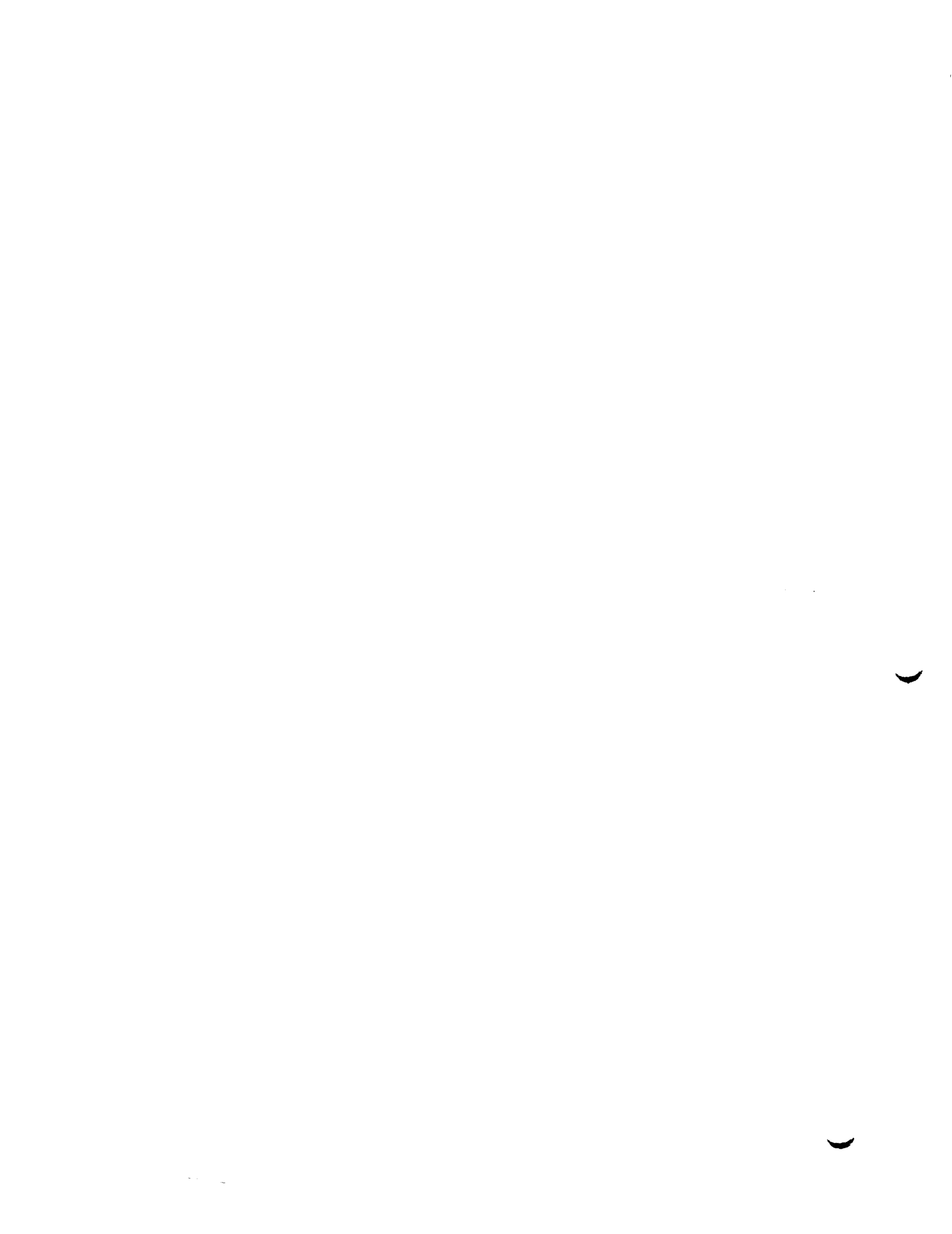
TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
Go thru system checking for RAR difficulties.					First scan complete. Few apparent problems.	
Define tasks for Performance Analysis.	SHW	C	3/1	3/1		
Reassemble system code.	ALL	C		9/1	Done for follow-on.	
Writeup rules for code generation of follow-on code.	SHW		4/17	5/1	Done.	2
Writeup rules and procedures for insuring code compatibility.	SHW	H	4/17	5/1	Done.	2
Generate program task list for tools/DEV/SSS.	VLV		3/1	3/15	Done.	
Fix MST generator to use new key words for access attributes.	SHW		5/15	5/26	Done.	
Fix checker to recognize new key words.	SHW		5/15	5/26	Done.	

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TASK AREA Peripheral I/O Development

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
Design the PIM.	NIM RFM	M	1/1 1/1	2/28	Initial draft ready for distribution. Not quite complete.	2
Code the PIM.	RBS MAM	M	3/13	4/3	Delayed for other jobs.	5
Modify printer DIM to use the PIM.	RBS MAM	M	3/27	4/10	Delayed for lack of personnel.	1
Modify punch DIM to use the PIM.	RBS MAM	M	3/27	4/10	Delayed for lack of personnel.	1
Modify card reader DIM to use the PIM.	RBS MAM	M	3/27	4/10	Delayed for lack of personnel.	1
Checkout of PIM and new DIM's.	RBS MAM	M	4/10	5/8	Delayed for lack of personnel.	4
Modify printer DCM for PRT-300 operation.	MAM	H	4/10	5/1		3
Modify IOM software to use address extension for extended IOM.		M				



TASK AREA BOS Follow-On Tasks

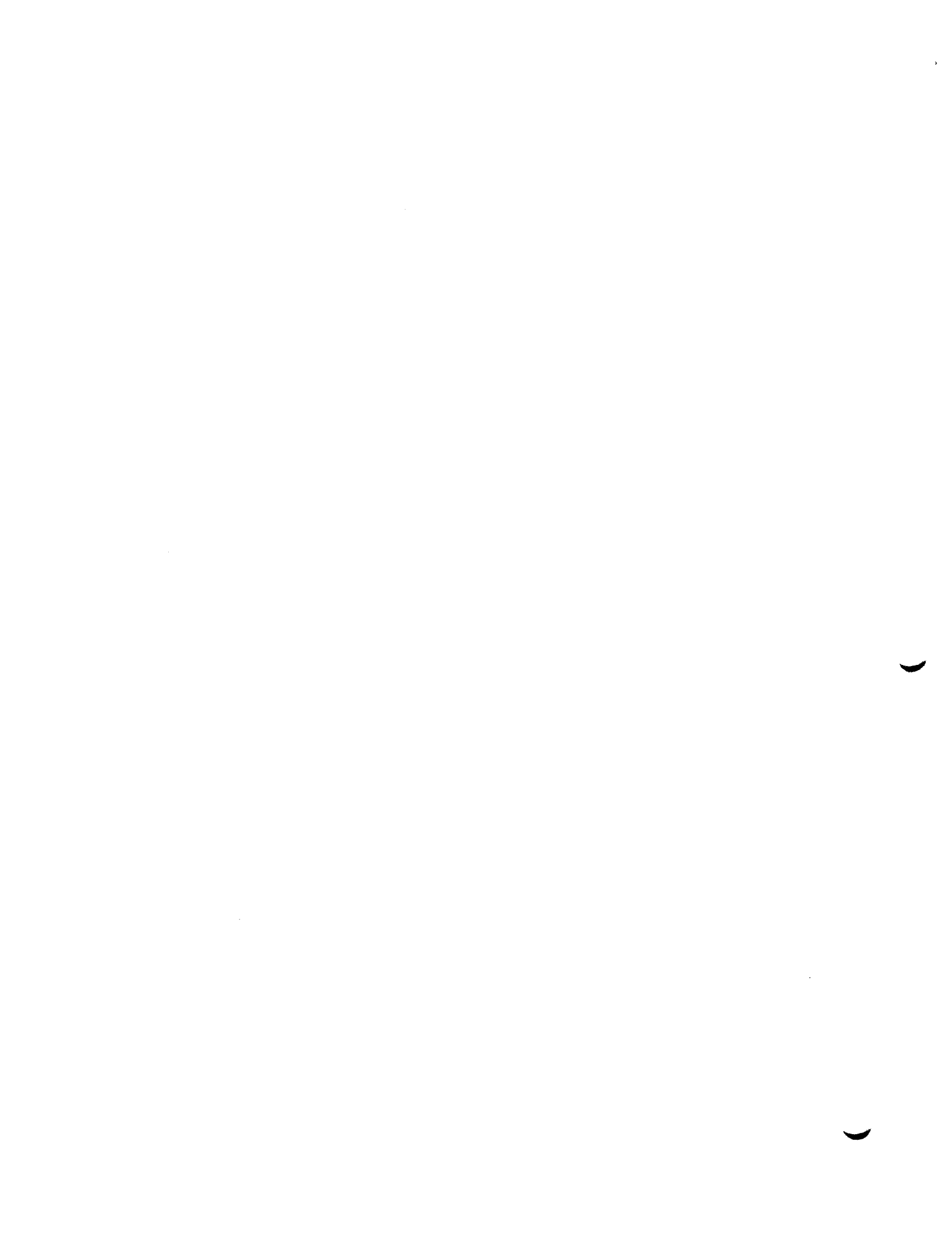
TASK DESCRIPTION	PERSONNEL	START	FINISH	CHANGES/STATUS	
Write and checkout BOS bulk store DIM.	RBS RFM	5/8 5/8	5/22 5/19	Done.	2
Write BOS T&D for bulk store.	RBS NIM	5/22 10/2	6/12 10/10	Done.	?
Audit current BOS programs for base register usage.	DRV	3/27 3/27	4/3 5/1	Done.	1
Modify BOS to shift interrupt vector to 0 absolute.	DRV RFM WSS (NIM)	3/27 5/1	5/10 5/15	Done.	2
Lay out memory map for Multics bootloads.	SHW NIM	2/16	2/21	Redone. BOS map has been generated.	1
Modify BOS to understand new control unit format (intfault incl alm).	DRV WSS	3/27 5/1	4/17 5/15	Done.	2
Modify BOS for use of new+privileged instructions. Clock readings.	DRV WSS	3/27 5/1	4/17 5/15	Done.	1 2
Implement new LDAC/IMW strategy for IOM.	RFM	3/27	4/3	No change necessary.	1
Modify "APND" to use new hardware SDW/PTW format.	WSS DRV	4/10 5/1	4/24 6/16	Done.	2
Write BOS T&D to checkout new follow-on CPU.		H 4/24	6/12	Tabled.	

TASK AREA BOS Follow-On Tasks

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
Write BOS 1 card loader for follow-on.	RFM	C	6/26	6/30 7/15	Done.	1
Modify DESEG+SDW handling internal to BOS.	DRV WSS		3/27 5/1	4/10 5/15	Done.	3
Modify BOS loader (1 card program) for MTS-500.		M	 	 		1
Modify BOS loading programs to read tape with MTS-500.		M	 	 		1
Checkout BOS bootloader with MTS-500 and DSU-181/190.		M	 	 		1
Modify BOS MST writing programs (ntape).		M	 	 		2
Checkout BOS ntape package.		M	 	 		1
Modify BOS disk DIMS for DSU-181/190.	CLJ	C	9/15 9/15	10/20 10/20	Done.	2
Checkout BOS DSU-181/190 DIM.	CLJ	C	9/15 9/15	11/1	In progress.	1
Modify BOS to reside on DSU-181/190's.	CLJ	C	9/15 9/15	11/20 10/20	Done.	2

TASK AREA BOS Follow-On Task

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
Checkout BOS running on DSU-181/190's.	CLJ	C	9/15 9/15	11/1	In progress.	2
Write 355 Dumper and Patcher for Multics core image.	RBS		5/22 5/22	5/31 5/31	Done.	1



TASK AREA DataNet 355 Development

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
Add fast list service subroutine to 355.	RBS		2/8	2/28	Done.	3
Train Doug Wells on HSLA, TTY DIM, etc.	RBS DMW		2/21	5/1	Done.	?
Analyze Phoenix written HSLA init code.	DMW RBS		4/24	5/1	Done.	1
Design init code.	RBS DMW		5/1	5/8	Done.	1
Design main module code.	RBS DMW	H	5/8	5/15	Begun.	1
Add HSLA simulation capability to 355 simulator.	RBS	H	5/15	5/22	Done.	1
Debugging under simulator.	DMW	H	5/22	6/19	Begun.	4
Debugging on Development machine.	DMW	H	6/19	7/17		4
Dynamically reconfigure DN-355.	RBS	H	9/15	11/1	In progress.	6
Convert software to use DIA instead of ICA.	RBS	H	9/1	10/26	Done.	2

TASK AREA DataNet 355 Development

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS
Make test to see if GIOC simulation will be fast enough.	RBS	C	8/1	8/15	Done. Appears okay.
			8/1	8/15	

TASK AREA New Software Development

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS	
Write programs to save the history reg's.	SHW NIM	C	6/4	6/12 6/18	Done.	
Write programs to use the mode register.	SHW NIM	C	6/4	6/12 6/18	Done.	
Write GECOS system simulator using BAR mode.		L				
Study MPC and PSIA Specs.	NIM RFM	C	3/13	3/20		1
Study DSS-181 and DSS-190 Specs.	NIM	C	3/13	3/20		1
Study MTS-500 Specs.	NIM	C	3/13	3/20		1
Examine changes to iom_manager for new disk channel.	NIM RFM	C				1
Code changes to iom_manager for new disk channel.		C				2
Examine modification to PIM for DSS-181/190 and MTS-500.		C				1
Design and code DSS-181/190 DIM's (Version 1).	LJS	C				4

TASK AREA New Software Development

TASK DESCRIPTION	PERSONNEL		START	FINISH	CHANGES/STATUS
Checkout DSS-181/190 DIMS.	LJS	C	/	/	2
Design MTS-500 DCM to use PIM.		H	/	/	4
Extend PIM to handle channels with multiple devices.		H	/	/	2
Code MTS-500 DCM.		H	/	/	2
Checkout MTS-500 DCM.		H	/	/	2
Design DSS-190 DIM Version II.		M	/	/	
Code DSS-190 DIM Version II.		M	/	/	
Code DSS-190 DIM Version II.		M	/	/	
Checkout DSS-190 DIM Version II.		M	/	/	
Change term_ to unsnap links in new way (new object segs).			/	/	

TASK AREA Miscellaneous

TASK DESCRIPTION	PERSONNEL	START	FINISH	CHANGES/STATUS	
Let linker make argument type checks (optional control).	CLJ L	3/27	5/8	Tabled.	6
Change binder to make argument type checks (optional control).	L				
Come up with new ALM manual - for users.	M				
Arrange for more TTY lines for follow-on configuration.	H			Done	
Implement software for ARPA Net on follow-on hardware.	H				
Design dynamic reconfiguration of bulk store (paging device).	RBS M			Tabled.	

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