

FROM: M. J. Grady
TO: Distribution
DATE: 04/13/76
SUBJECT: MR 5.0 MCS Plans

I. SIGNIFICANT EVENTS

This MTR outlines the MCS development plans for Multics Release 5.0. The main development for MR5.0 will be FNP bootload from Multics. Since we will be able to bootload the FNP from Multics, it will no longer be necessary to crash Multics when the FNP crashes. Instead a dump of the FNP will be taken and it will be reloaded. This should reduce any chance of damage to the storage system which is always possible when the system crashes.

At MR5.0 Multics will support physical binary synchronous communications protocols. This means that the FNP will be able to support the Honeywell bisync subchannel of the HSLA, and the software will be able to transmit and receive bisync data. There are no plans to make use of these features in MR5.0 but the implementation of something like a 2780 DIM for Multics would be relatively simple at that time. The bisync protocol is being implemented now in a phased plan to develop remote concentrators for Multics.

Also for MR5.0, a Multics version of the 355 linking loader, rlod, is being designed and implemented. This will allow faster FNP core image builds and improved control of configuration and software features included in the core image. This will enable site specific core images to be created for optimum FNP performance.

The Channel Definition Table (CDT) will be expanded to include the baud rate of the channels (eliminating the need for HSLA and LSLA config cards), and FNP configuration info and core image specifications.

During this period, time will be devoted to the PLM for MCS (AN85) in hopes of having it ready for MR5.0. If any time remains the implementation of user settable translation and delay timing tables will be considered.

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The following information was obtained from the files of the FBI on the subject of the above captioned case. The subject is a male, born [redacted], residing at [redacted], [redacted], [redacted]. The subject is currently employed as [redacted] at [redacted], [redacted], [redacted]. The subject has been identified as a [redacted] in the past. The following information was obtained from the files of the FBI on the subject of the above captioned case. The subject is a male, born [redacted], residing at [redacted], [redacted], [redacted]. The subject is currently employed as [redacted] at [redacted], [redacted], [redacted]. The subject has been identified as a [redacted] in the past.

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TASK DESCRIPTION	PERSONNEL	START	FINISH	M-W	CHANGES-STATUS
FNP linker design	Grady Coren Barr	FW16	FW17	12	
Implement FNP linker	Barr	FW17	FW25	8	
Implement physical Bisync protocols in FNP	Adsit	FW17	FW35	10	
Remove FNP pre-init code (for new linker)	Grady Coren	FW17	FW19	4	
Design CDT changes	Grady Casey	FW19	FW20	1	
Break up FNP control_tables for selective builds	Coren	FW19	FW20	1	
Build dummy interface to allow AS installation	Grady	FW20	FW21	1	
Code fnp_init (basic Multics FNP initialization)	Coren	FW20	FW21	1	
Design and code new tty_init	Grady Coren	FW21	FW22	2	
Design and code load_fnp_ (based on ld355)	Grady	FW22	FW26	4	
Build load_fnp command	Coren	FW22	FW23	1	

TASK DESCRIPTION	PERSONNEL	START	FINISH	M-W	CHANGES-STATUS
Build hphcs \$load_fnp (ring 0 routine to do bootload I/O)	Coren	FW23	FW25	2	
Modify dn355 to handle bootload status	Coren	FW25	FW26	1	
Modify FNP init to send new bootload status	Grady	FW26	FW27	1	
Modify tty_index for new tty channel names	Coren	FW26	FW27	1	
Bootload testing	Grady Coren	FW27	FW29	4	
Handle FNP crash in dn355	Grady	FW29	FW31	2	
Code fdump_fnp	Coren	FW29	FW31	2	
Bootload testing	Grady Coren	FW32	FW34	4	
MCS PLM	Grady Coren	FW16	FW39	?	Ongoing task
User settable translation and delay timings tables	Grady Coren				Unscheduled

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TASK DESCRIPTION	PERSONNEL	START	FINISH	M-W	CHANGES-STATUS
Implement CDT changes, build conversion tools	Grady Casey	FW20	FW21	3	
Modify as_init_ to do FNP loading	Casey	FW22	FW24	2	
Modify AS for fnp_up and fnp_down signals	Casey	FW24	FW26	2	
Modify AS to rename tty channels	Casey Grady	FW26	FW28	2	
Fix message coordinator to handle lost MC tty	Casey	FW28	FW29	1	