

TO: Distribution  
FROM: Ross E. Klinger  
DATE: December 2, 1974  
SUBJECT: ANSI Standard Tape I/O Module - Project Status

## I. SIGNIFICANT EVENTS

Testing of Version Three of the ANSI Tape I/O Module is complete, including multi-volume file/file-set capability. Work on support of IBM Standard Labeled tapes has begun, and is proceeding on schedule. A meeting with Multics COBOL compiler development group has been scheduled for December 3 to discuss COBOL tape requirements.

## II. TASK STATUS

The code supporting the `iox_$position` and `iox_$read_length` entry points has been written and tested. The multi-volume capability was written and tested, using both single and multiple drives. Code to provide a run-time volume initialization capability was added to the I/O Module.

A new MTB is being prepared which describes the latest (and final) changes to the attach description, the new position and `read_length` entries, and a detailed description of the control operations. An MCR will be submitted as soon as the MTB has been published.

## III. PROBLEM AREAS

The ANSI standard requires that volumes be initialized with a VOL1 label and a dummy file before they can be used for output. The rules which determine whether or not a volume can be initialized (or, in certain cases, re-initialized) are rather complex; furthermore, the standard prohibits the application program from overriding these rules.

The ANSI I/O Module makes provision for querying the user when override permission is needed, although this action is not strictly in accordance with the standard. It therefore appears as though a new command which can initialize volumes before they are used should be written.

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## IV. FUTURE PLANS

During December, the ANSI I/O Module will be extended to support user file labels and the COBOL OPEN and CLOSE requirements. The processing of IBM standard label and non-labeled tape (excluding DOS LTM format) will be implemented.

An MTB describing the final ANSI I/O Module interfaces will be published, and an MCR submitted. As the IBM I/O Module operation and interface does not differ significantly from the ANSI I/O Module, a separate MTB will not be written. The ANSI MCR will cover the IBM module, which is really only a different entry in the ANSI attach code.

The PLM documentation will be written during the first two weeks of January; there is no need for its completion before installation.

Note that the above schedule is contingent upon reasonable "meshing" of the I/O Module implementation with the requirements of the COBOL compiler development group. After reading over a Honeywell document, Functionality for Tape Handling in ANS COBOL, it appears as though there will be no serious difficulty in modifying and extending the I/O module to conform to their needs. Of course, the final determination cannot be made until the meeting with the group actually takes place.

PROJECT \_\_\_\_\_ ANSI Standard Tape I/O Module \_\_\_\_\_ AREA \_\_\_\_\_ ANSI Tape Module: Version Three \_\_\_\_\_

TASK DESCRIPTION	PERSONNEL	START	FINISH	M-H	CHANGES-STATUS
ANSI Tape Module: correct Version	Klinger	10/11/74	10/16/74	5.2	Done
Two deficiencies		10/11/74	10/18/74	5.4	
ANSI Tape Module: convert to lox_ interfaces	Klinger	10/17/74	10/28/74	1.5	Done
		10/07/74	10/25/74	2.4	
ANSI Tape Module: test lox_ version (without volume switching)	Klinger	10/21/74	10/31/74	1.4	Done
		10/29/74	11/06/74	1.4	
Tape Mount simulator: support volume switching	Klinger	10/29/74	10/30/74	.2	Done
		11/07/74	11/08/74	.2	
ANSI Tape Module: support multi-volume files	Klinger	10/31/74	11/06/74	1	Done
		11/11/74	11/15/74	1	
ANSI Tape Module: support lox_\$position and lox_\$read_length entry points	Klinger	11/18/74	11/22/74	1	Done
		11/18/74	11/22/74	1	
ANSI Tape Module: support processing of EBCDIC data in tape files	Klinger				Done
ANSI Tape Module: support reading/writing of user file labels	Klinger				Postponed until COBOL user label processing requirements are defined
ANSI Tape Module: enhance volume initialization, file locking, and lox_\$control functions	Klinger	12/16/74	12/20/74	1.0	
ANSI Tape Module: support ANS COBOL OPEN and CLOSE	Klinger	12/23/74	12/31/74	1.2	

TASK DESCRIPTION	PERSONNEL	SIARI	FINISH	M-W	CHANGES-STATUS
IBM Tape Module: support IBM Standard Labeled Tapes	KI Inger	11/25/74	12/10/74	2.0	40% Done
IBM Tape Module: allow attach options to supply information from a MISSING HDR2 Label	KI Inger				Done
IBM Tape Module: support DOS tape formats	KI Inger				Done
IBM Tape Module: support non-labeled tapes	KI Inger	12/11/74	12/13/74		Note - DOS unlabeled LTM format will not be supported
IBM Tape Module: support processing of ASCII data in tape files	KI Inger				Done

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PROJECT \_\_\_\_\_ ANSI Standard Tape I/O Module \_\_\_\_\_ AREA \_\_\_\_\_ Documentation \_\_\_\_\_

TASK DESCRIPTION	PERSONNEL	START	FINISH	M-W	CHANGES-SIATUS
ANSI I/O Module: provide MPM documentation	Klinger	08/19/74 08/19/74	12/31/74	2.0	Documentation for Version Three 50% done
IBM I/O Module: provide MPM documentation	Klinger	08/19/74 08/26/74	12/31/74	2.0	Documentation for Version Two 25% done
ANSI/IBM I/O Modules: provide PLM documentation for I/O Modules	Klinger	01/02/75	01/16/75	2.0	

