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;MASTER CATALOG UPDATE - UCAT.ASM
;01/07/78 BY WARD CHRISTENSEN
;01/10/78 ADD:
;
;           (RUN UCAT)
;           ERA MAST.BAK
;           REN MAST.BAK=MAST.CAT
;           REN MAST.CAT=NEW.CAT
;           ERA NAMES.SUB
; 4 SEPT 80 MODIFIED BY TREVOR MARSHALL
;           UNI W A
;           DEPT ELEC ENG
;   UPDATES ON TUG DISCS ADDED,
;   WILDCARD IGNORE CAPABILITY
0100          ORG          100H
1400 =        BSIZE      EQU      1400H      ;DK BUF SIZE (TIMES 3)
; BSIZE WAS 1000H ORIGINALLY
0400 =        IGNSIZE    EQU      1024      ;BUFF FOR IGNORED NAMES
0000 =        TEST       EQU      0          ;TESTING?
;
;           MACLIB      SEQIO
07F6 #        FILERR    SET      EXIT      ;EXIT IF ERRORS
MOVE          MACRO     ?F,?T,?L
;           MVI         B,?L
;           LXI         D,?F
;           LXI         H,?T
;           CALL        MOVER
;           ENDM
;
;           COMPARE     MACRO   ?F1,?F2,?L
;           MVI         B,?L
;           LXI         D,?F1
;           LXI         H,?F2
;           CALL        COMPR
;           ENDM
;
;
;SAVE CP/M'S STACK
;
0100 E1          POP      H          ;GET CP/M RET ADDR
0101 22F707      SHLD     EXIT+1     ;SAVE IN EXIT JMP
0104 312B08      LXI     SP,STACK
;           FILE      INFILE,MASTIN,,MAST,CAT,BSIZE
0001+=          MASTINTYP EQU      INFILE
0107+C33101     JMP      ??0008
010A+00         DB      0
010B+4D         DB      'M'
010C+41         DB      'A'
010D+53         DB      'S'
010E+54         DB      'T'
010F+20         DB      ' '
0110+20         DB      ' '
0111+20         DB      ' '
0112+20         DB      ' '
0113+43         DB      'C'
0114+41         DB      'A'
0115+54         DB      'T'
010A+=          FCBMASTIN EQU      $-12
0116+00         DB      0
0117+          DS      20

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012B+850C	DW	MASTINBUF
1400+=	MASTINSIZ	EQU @BS
012D+0014	DW	@BS
012F+	DS	2
0131+C3A101	JMP	??0001
0134+2A2D01	LHLD	MASTINLEN
0137+EB	XCHG	
0138+2A2F01	LHLD	MASTINPTR
013B+7D	MOV	A, L
013C+93	SUB	E
013D+7C	MOV	A, H
013E+9A	SBB	D
013F+DA8A01	JC	??0007
0142+210000	LXI	H, 0
0145+222F01	SHLD	MASTINPTR
0148+EB	XCHG	
0149+2A2D01	LHLD	MASTINLEN
014C+7B	MOV	A, E
014D+95	SUB	L
014E+7A	MOV	A, D
014F+9C	SBB	H
0150+D27C01	JNC	??0006
0153+2A2B01	LHLD	MASTINADR
0156+19	DAD	D
0157+EB	XCHG	
0158+0E1A	MVI	C, @DMA
015A+CD0500	CALL	@BDOS
015D+110A01	LXI	D, FCBMASTIN
0160+0E14	MVI	C, @FRD
0162+CD0500	CALL	@BDOS
0165+B7	ORA	A
0166+C27601	JNZ	??0005
0169+118000	LXI	D, @SECT
016C+2A2F01	LHLD	MASTINPTR
016F+19	DAD	D
0170+222F01	SHLD	MASTINPTR
0173+C34801	JMP	??0004
0176+2A2F01	LHLD	MASTINPTR
0179+222D01	SHLD	MASTINLEN
017C+118000	LXI	D, @TBUF
017F+0E1A	MVI	C, @DMA
0181+CD0500	CALL	@BDOS
0184+210000	LXI	H, 0
0187+222F01	SHLD	MASTINPTR
018A+EB	XCHG	
018B+2A2B01	LHLD	MASTINADR
018E+19	DAD	D
018F+EB	XCHG	
0190+2A2D01	LHLD	MASTINLEN
0193+7D	MOV	A, L
0194+B4	ORA	H
0195+3E1A	MVI	A, EOF
0197+C8	RZ	
0198+1A	LDAX	D
0199+2A2F01	LHLD	MASTINPTR
019C+23	INX	H

019D+222F01		SHLD	MASTINPTR
01A0+C9		RET	
01A1+AF		XRA	A
01A2+321601		STA	FCBMASTIN+12
01A5+322A01		STA	FCBMASTIN+32
01A8+210014		LXI	H,MASTINSIZ
01AB+222D01		SHLD	MASTINLEN
01AE+222F01		SHLD	MASTINPTR
01B1+0E0F		MVI	C,@OPN
01B3+110A01		LXI	D,FCBMASTIN
01B6+CD0500		CALL	@BDOS
01B9+3C		INR	A
01BA+C2D901		JNZ	??0003
01BD+0E09		MVI	C,@MSG
01BF+11C801		LXI	D,??0002
01C2+CD0500		CALL	@BDOS
01C5+C3F607		JMP	FILERR
01C8+0D0A	??0002:	DB	CR,LF
01CA+4E4F204D41		DB	'NO MASTIN FILE'
01D8+24		DB	'\$'
		FILE	INFILE,NAMES,,NAMES,SUB,BSIZE
0001+=	NAMESTYP	EQU	INFILE
01D9+C30302		JMP	??0016
01DC+00		DB	0
01DD+4E		DB	'N'
01DE+41		DB	'A'
01DF+4D		DB	'M'
01E0+45		DB	'E'
01E1+53		DB	'S'
01E2+20		DB	' '
01E3+20		DB	' '
01E4+20		DB	' '
01E5+53		DB	'S'
01E6+55		DB	'U'
01E7+42		DB	'B'
01DC+=	FCBNAMES	EQU	\$-12
01E8+00		DB	0
01E9+		DS	20
01FD+8520		DW	NAMESBUF
1400+=	NAMESSIZ	EQU	@BS
01FF+0014		DW	@BS
0201+		DS	2
0203+C37302		JMP	??0009
0206+2AFF01		LHLD	NAMESLEN
0209+EB		XCHG	
020A+2A0102		LHLD	NAMESPTR
020D+7D		MOV	A,L
020E+93		SUB	E
020F+7C		MOV	A,H
0210+9A		SBB	D
0211+DA5C02		JC	??0015
0214+210000		LXI	H,0
0217+220102		SHLD	NAMESPTR
021A+EB		XCHG	
021B+2AFF01		LHLD	NAMESLEN
021E+7B		MOV	A,E

021F+95	SUB	L
0220+7A	MOV	A, D
0221+9C	SBB	H
0222+D24E02	JNC	??0014
0225+2AFD01	LHLD	NAMESADR
0228+19	DAD	D
0229+EB	XCHG	
022A+0E1A	MVI	C, @DMA
022C+CD0500	CALL	@BDOS
022F+11DC01	LXI	D, FCBNAMES
0232+0E14	MVI	C, @FRD
0234+CD0500	CALL	@BDOS
0237+B7	ORA	A
0238+C24802	JNZ	??0013
023B+118000	LXI	D, @SECT
023E+2A0102	LHLD	NAMESPTR
0241+19	DAD	D
0242+220102	SHLD	NAMESPTR
0245+C31A02	JMP	??0012
0248+2A0102	LHLD	NAMESPTR
024B+22FF01	SHLD	NAMESLEN
024E+118000	LXI	D, @TBUF
0251+0E1A	MVI	C, @DMA
0253+CD0500	CALL	@BDOS
0256+210000	LXI	H, 0
0259+220102	SHLD	NAMESPTR
025C+EB	XCHG	
025D+2AFD01	LHLD	NAMESADR
0260+19	DAD	D
0261+EB	XCHG	
0262+2AFF01	LHLD	NAMESLEN
0265+7D	MOV	A, L
0266+B4	ORA	H
0267+3E1A	MVI	A, EOF
0269+C8	RZ	
026A+1A	LDAX	D
026B+2A0102	LHLD	NAMESPTR
026E+23	INX	H
026F+220102	SHLD	NAMESPTR
0272+C9	RET	
0273+AF	XRA	A
0274+32E801	STA	FCBNAMES+12
0277+32FC01	STA	FCBNAMES+32
027A+210014	LXI	H, NAMESSIZ
027D+22FF01	SHLD	NAMESLEN
0280+220102	SHLD	NAMESPTR
0283+0E0F	MVI	C, @OPN
0285+11DC01	LXI	D, FCBNAMES
0288+CD0500	CALL	@BDOS
028B+3C	INR	A
028C+C2AA02	JNZ	??0011
028F+0E09	MVI	C, @MSG
0291+119A02	LXI	D, ??0010
0294+CD0500	CALL	@BDOS
0297+C3F607	JMP	FILERR
029A+0D0A	??0010: DB	CR, LF

029C+4E4F204E41	DB	'NO NAMES FILE'
02A9+24	DB	'\$'
	IF	NOT TEST
	FILE	OUTFILE,MASTOUT,,NEW,CAT,BSIZE
0002+=	MASTOUTTYP	EQU OUTFILE
02AA+C3D402	JMP	??0024
02AD+00	DB	0
02AE+4E	DB	'N'
02AF+45	DB	'E'
02B0+57	DB	'W'
02B1+20	DB	' '
02B2+20	DB	' '
02B3+20	DB	' '
02B4+20	DB	' '
02B5+20	DB	' '
02B6+43	DB	'C'
02B7+41	DB	'A'
02B8+54	DB	'T'
02AD+=	FCBMASTOUT	EQU \$-12
02B9+00	DB	0
02BA+	DS	20
02CE+8534	DW	MASTOUTBUF
1400+=	MASTOUTSIZ	EQU @BS
02D0+0014	DW	@BS
02D2+	DS	2
02D4+C35903	JMP	??0017
02D7+F5	PUSH	PSW
02D8+2AD002	LHLD	MASTOUTLEN
02DB+EB	XCHG	
02DC+2AD202	LHLD	MASTOUTPTR
02DF+7D	MOV	A,L
02E0+93	SUB	E
02E1+7C	MOV	A,H
02E2+9A	SBB	D
02E3+DA4903	JC	??0023
02E6+210000	LXI	H,0
02E9+22D202	SHLD	MASTOUTPTR
02EC+EB	XCHG	
02ED+2AD002	LHLD	MASTOUTLEN
02F0+7B	MOV	A,E
02F1+95	SUB	L
02F2+7A	MOV	A,D
02F3+9C	SBB	H
02F4+D23B03	JNC	??0022
02F7+2ACE02	LHLD	MASTOUTADR
02FA+19	DAD	D
02FB+EB	XCHG	
02FC+0E1A	MVI	C,@DMA
02FE+CD0500	CALL	@BDOS
0301+11AD02	LXI	D,FCBMASTOUT
0304+0E15	MVI	C,@FWR
0306+CD0500	CALL	@BDOS
0309+B7	ORA	A
030A+C21A03	JNZ	??0021
030D+118000	LXI	D,@SECT
0310+2AD202	LHLD	MASTOUTPTR

0313+19		DAD	D
0314+22D202		SHLD	MASTOUTPTR
0317+C3EC02		JMP	??0020
031A+0E09		MVI	C,@MSG
031C+112603		LXI	D,??0025
031F+CD0500		CALL	@BDOS
0322+F1		POP	PSW
0323+C3F607		JMP	FILERR
0326+0D0A	??0025:	DB	CR,LF
0328+4449534B20		DB	'DISK FULL: MASTOUT'
033A+24		DB	'\$'
033B+118000		LXI	D,@TBUF
033E+0E1A		MVI	C,@DMA
0340+CD0500		CALL	@BDOS
0343+210000		LXI	H,0
0346+22D202		SHLD	MASTOUTPTR
0349+EB		XCHG	
034A+2ACE02		LHLD	MASTOUTADR
034D+19		DAD	D
034E+EB		XCHG	
034F+F1		POP	PSW
0350+12		STAX	D
0351+2AD202		LHLD	MASTOUTPTR
0354+23		INX	H
0355+22D202		SHLD	MASTOUTPTR
0358+C9		RET	
0359+AF		XRA	A
035A+32B902		STA	FCBMASTOUT+12
035D+32CD02		STA	FCBMASTOUT+32
0360+210014		LXI	H,MASTOUTSIZ
0363+22D002		SHLD	MASTOUTLEN
0366+210000		LXI	H,0
0369+22D202		SHLD	MASTOUTPTR
036C+0E13		MVI	C,@DEL
036E+11AD02		LXI	D,FCBMASTOUT
0371+CD0500		CALL	@BDOS
0374+0E16		MVI	C,@MAK
0376+11AD02		LXI	D,FCBMASTOUT
0379+CD0500		CALL	@BDOS
037C+3C		INR	A
037D+C2A303		JNZ	??0019
0380+0E09		MVI	C,@MSG
0382+118B03		LXI	D,??0018
0385+CD0500		CALL	@BDOS
0388+C3F607		JMP	FILERR
038B+0D0A	??0018:	DB	CR,LF
038D+4E4F204449		DB	'NO DIR SPACE: MASTOUT'
03A2+24		DB	'\$'
		ENDIF	
		FILE	SETFILE,BAK,,MAST,BAK
0003+=	BAKTYP	EQU	SETFILE
03A3+C3C703		JMP	??0033
03A6+00		DB	0
03A7+4D		DB	'M'
03A8+41		DB	'A'
03A9+53		DB	'S'

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03AA+54          DB      'T'
03AB+20          DB      ' '
03AC+20          DB      ' '
03AD+20          DB      ' '
03AE+20          DB      ' '
03AF+42          DB      'B'
03B0+41          DB      'A'
03B1+4B          DB      'K'
03A6+=           FCBBAK  EQU      $-12
03B2+00          DB      0
03B3+           DS      20

;
;SETUP THE FILES
;
03C7 CDD105      INITRD  CALL      READNA ;READ NAMES FILE
;
;IF NAME IS $$$ .SUB THEN SKIP IT
;
                COMPARE  NADAT, SUBNAME, 12
03CA+060C        MVI      B, 12
03CC+112D08      LXI      D, NADAT
03CF+217808      LXI      H, SUBNAME
03D2+CD4607      CALL     COMPR
03D5 CAC703      JZ      INITRD

;
;CHECK FOR '-DISKNAME' HAVING BEEN READ
;
03D8 3A2D08      LDA      NADAT
03DB FE2D        CPI      '-'
03DD CA6204      JZ      NAMEOK
;THE FOLLOWING CODE IS PATCHED VIA DISASSEMBLY
03E0 3A5D00      LDA      5DH
03E3 FE2D        CPI      '-'
03E5 C22604      JNZ     ERRXIT
03E8 3A6700      LDA      67H
03EB FE20        CPI      ' '
03ED C20D04      JNZ     NEWSUB
03F0 CDF007      CALL     MSGXIT
03F3 2B2B534552 DB      '++SERIAL MUST'
0400 2042452033 DB      ' BE 3 DIGIT$$'

;
040D 0607        NEWSUB  MVI      B, 7
040F 115E00      LXI      D, 5EH
0412 213A08      LXI      H, DKNAME
0415 CD3D07      CALL     MOVER
0418 0603        MVI      B, 3
041A 116500      LXI      D, 65H
041D 214308      LXI      H, NEW
0420 CD3D07      CALL     MOVER
0423 C37804      JMP      NXT1

;
0426 CDF007      ERRXIT  CALL     MSGXIT
0429 2B2B4E4F20 DB      '++NO "-NAME.NNN" IN NAMES.SUB'
0446 0D0A2B2B52 DB      0DH, 0AH, '++REISSUE: UCAT '
0458 2D6E616D65 DB      '-name.nnn$'
;              CALL     MSGXIT

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;      DB      '++NO ''-NAME'' IN DIRECTORY$'
;
NAMEOK MOVE      NADAT+1,DKNAME,7
0462+0607      MVI      B,7
0464+112E08    LXI      D,NADAT+1
0467+213A08    LXI      H,DKNAME
046A+CD3D07    CALL     MOVER
                MOVE     NADAT+9,DKNAME+9,3
046D+0603      MVI      B,3
046F+113608    LXI      D,NADAT+9
0472+214308    LXI      H,DKNAME+9
0475+CD3D07    CALL     MOVER
;
;READ IN THE NAMES TO BE IGNORED (I.E. NOT
;CATALOGED).  THEY ARE AT THE FRONT OF MAST CAT.
;THEY ARE SIMPLY A LIST OF FILENAME.FILETYPE (CR/LF)
;WITH THE FIRST HAVING A ( BEFORE IT, AND THE
;LAST HAVING A ) AFTER IT.
;
NXT1  GET      MASTIN ;GET THE LEADING '('
0478+CD3401    CALL     GETMASTIN
047B CACD04    JZ      NOIGN ;IF EOF
047E FE28      CPI      '('
0480 C2CD04    JNZ     NOIGN
                PUT      MASTOUT
0483+CDD702    CALL     PUTMASTOUT
0486 218408    LXI      H,IGNORE ;POINT TO BUFFER
0489 010004    LXI      B,IGNSIZE ;FOR BUFFER OVERFLOW TEST
048C C5        IGNRD   PUSH     B
048D E5        PUSH     H
                GET      MASTIN
048E+CD3401    CALL     GETMASTIN
0491 CAEE04    JZ      IGNEOF ;UNEXPECTED EOF
0494 F5        PUSH     PSW ;SAVE CHAR
                PUT      MASTOUT
0495+CDD702    CALL     PUTMASTOUT
0498 F1        POP      PSW
0499 E1        POP      H
049A C1        POP      B
049B 77        MOV      M,A
049C 23        INX      H
049D FE29      CPI      ')'
049F CA3405    JZ      IGNEND ;TABLE IS LOADED
04A2 0B        DCX     B ;MORE ROOM IN TABLE?
04A3 78        MOV      A,B
04A4 B1        ORA     C
04A5 C28C04    JNZ     IGNRD
;TABLE OVERFLOW
04A8 CDF007    CALL     MSGXIT
04AB 2B2B544F4F DB      '++TOO MANY IGNORE NAMES FOR TABLE$'
04CD CDF007    NOIGN   CALL     MSGXIT
04D0 2B2B4E4F20 DB      '++NO IGNORE NAMES IN MAST.CAT$'
04EE CDF007    IGNEOF  CALL     MSGXIT
04F1 2B2B454F46 DB      '++EOF READING FOR IGNORE NAMES.'
0510 0D0A4D4159 DB      0DH,0AH,'MAY BE MISSING ) AFTER LAST NAME.$'
                IGNEND  GET      MASTIN

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0534+CD3401      CALL      GETMASTIN
0537 CAEE04      JZ        IGNEOF
053A F5          PUSH     PSW
                PUT      MASTOUT
053B+CDD702     CALL     PUTMASTOUT
053E F1         POP      PSW
053F FE0A       CPI      0AH
0541 C23405     JNZ     IGNEND ;DELETE CR/LF
0544 C34A05     JMP     MASTLP
                ;PRIME THE BUFFERS
                ;
0547 CDD105     NAMELP  CALL     READNA ;READ NAME INTO NADAT
054A CD6506     MASTLP  CALL     READMI ;READ MASTER INTO MIDAT
                ;IF EOF ON BOTH FILES, WE ARE ALL DONE
054D 3A2B08     COMPLP LDA     NAEOFLG ;NAME FILE EOF?
0550 B7         ORA     A
0551 CA5B05     JZ      NOTEOF ;..NO
0554 3A2C08     LDA     MIEOFLG ;MASTER IN EOF?
0557 B7         ORA     A
0558 C25007     JNZ     ALLDONE ;YES, THAT'S IT.
NOTEOF COMPARE  NADAT,MIDAT,25
055B+0619      MVI     B,25
055D+112D08    LXI     D,NADAT
0560+214608    LXI     H,MIDAT
0563+CD4607    CALL    COMPR
0566 CAC005     JZ      EQUAL
0569 DA9D05     JC      WRITEN
                ;
                ;MASTER IS LOWER - WRITE IT IF FOR ANOTHER DISK
                ;
                COMPARE  MIDSK,DKNAME,12 ;SAME DISK?
056C+060C      MVI     B,12
056E+115308    LXI     D,MIDSK
0571+213A08    LXI     H,DKNAME
0574+CD4607    CALL    COMPR
0577 CA8B05     JZ      DELMI ;DELETING MIDAT
                MOVE     MIDAT,MODAT,25
057A+0619      MVI     B,25
057C+114608    LXI     D,MIDAT
057F+215F08    LXI     H,MODAT
0582+CD3D07    CALL    MOVER
0585 CDCE06     CALL    WRITEMO
0588 C34A05     JMP     MASTLP
                ;
                ;DELETE MASTER IN
                ;
058B 119705     DELMI  LXI     D,DELMSG
058E 214608     LXI     H,MIDAT
0591 CD0807     CALL    MESSG
0594 C34A05     JMP     MASTLP
0597 44454C3A20DELMSG DB    'DEL: $'
                ;
                ;NAME IS LOWER - WRITE IT
                ;
WRITEN  MOVE     NADAT,MODAT,25
059D+0619      MVI     B,25

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059F+112D08          LXI      D,NADAT
05A2+215F08          LXI      H,MODAT
05A5+CD3D07          CALL     MOVER
05A8 CDCE06          CALL     WRITEMO
;
;PRINT THAT NAME WAS ADDED
;
05AB 11BA05          LXI      D,ADDMSG
05AE 212D08          LXI      H,NADAT
05B1 CD0807          CALL     MMSG
05B4 CDD105          CALL     READNA ;READ NEXT NAME
05B7 C34D05          JMP      COMPLP
05BA 4144443A20ADDMSG DB      'ADD: $'
;
;BOTH FILES EQUAL
;
EQUAL      MOVE      MIDAT,MODAT,25
05C0+0619          MVI      B,25
05C2+114608          LXI      D,MIDAT
05C5+215F08          LXI      H,MODAT
05C8+CD3D07          CALL     MOVER
05CB CDCE06          CALL     WRITEMO ;WRITE OUT MASTER
05CE C34705          JMP      NAMELP ;READ BOTH
;
;READ NAME FILE
;
05D1 212D08          READNA  LXI      H,NADAT
05D4 0608            MVI      B,8
05D6 CD1A06          CALL     READNAC ;READ CHARACTERS
05D9 362E            MVI      M,'.'
05DB 23              INX      H
05DC 0603            MVI      B,3 ;TYPE LENGTH
05DE CD1A06          CALL     READNAC
05E1 362C            MVI      M',''
;
;IF THIS IS A NAME NOT TO BE CATALOGED,
;READ THE NEXT
;
05E3 118408          LXI      D,IGNORE ;GET IGNORE TABLE
05E6 212D08          IGNLPL LXI      H,NADAT
05E9 060C            MVI      B,12 ;# OF CHARS TO MATCH
05EB 1A              IGNCLPL LDAX     D ;GET IGNORE CHAR INTO A
05EC FE3F            CPI      '?' ;IS IT WILDCARD?
05EE CA0806          JZ      IGNMAT ;IF SO, CONSIDER MATCHED
05F1 BE              CMP      M ;IS IT THE SAME?
05F2 CA0806          JZ      IGNMAT ;YES, MATCHED
05F5 7E              MOV      A,M ;GET CHAR
05F6 FE20            CPI      ' ' ;SPACE?
05F8 CA1106          JZ      IGNMAT1 ;MATCH NOT NECESSARY
; THE PREVIOUS CODE FAILED WITH AN FCB OF THE FORM DUMMY
; (W/O .EXT), AS THE BLANKS WERE NOT REQUIRED TO
; MATCH IN THE EXTENSION
; FIX: ENSURE THAT IF THE BLANK SKIP PATH IS FOLLOWED
; THAT THE CHARACTER COUNT IS NOT 9
;
;GET NEXT ENTRY

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;
05FB 1A      IGNEXT E LDAX      D
05FC 13      INX              D
05FD FE29    CPI              ' ) '      ;END OF TABLE?
05FF C8      RZ              ;..YES, RETURN
0600 FE0A    CPI              0AH        ;NEXT LINE?
0602 C2FB05  JNZ              IGNEXT E
0605 C3E605  JMP              IGNLP

;
;CHAR MATCHED
;
0608 13      IGNMAT  INX      D      ;SKIP MATCH CHAR
0609 23      IGNMAT2 INX      H
060A 05      DCR              B
060B C2EB05  JNZ              IGNCLP ;LOOP UNTIL DONE

;
;NAME IS TO BE DELETED
;
060E C3D105  JMP              READNA ;READ NEXT NAME

;
; CHECK IF CHARACTER COUNT IS 9 ( .EXT)
0611 78      IGNMAT1 MOV      A,B      ;FETCH COUNT
0612 FE03    CPI              3
0614 CAFB05  JZ              IGNEXT E ;IF 9, DONT SKIP
0617 C30906  JMP              IGNMAT2

;
;READ CHARACTERS INTO NAME BUFFER
;
061A 3A2B08  READNAC LDA      NAE OFLG ;EOF ON NAMES?
061D B7      ORA              A
061E C25806  JNZ      NAE OF      ;YES, PAD W/OFFH
0621 E5      PUSH             H
0622 C5      PUSH             B
GETNA GET      NAMES
0623+CD0602 CALL      GETNAMES
0626 FE0A    CPI              0AH
0628 CA2306  JZ              GETNA  ;IGNORE LF
062B C1      POP              B
062C E1      POP              H
062D FE2E    CPI              ' . '      ;END?
062F CA5006  JZ              NAEND
0632 FE0D    CPI              0DH        ;END?
0634 CA5006  JZ              NAEND
0637 FE1A    CPI              ' Z '-40H ;EOF?
0639 CA5806  JZ              NAE OF
063C 77      MOV              M,A
063D 23      INX              H
063E 05      DCR              B
063F C21A06  JNZ      READNAC
0642 C5      PUSH             B
0643 E5      PUSH             H
GET      NAMES ;KILL DELIMITER CHAR
0644+CD0602 CALL      GETNAMES
0647 E1      POP              H
0648 C1      POP              B
0649 FE1A    CPI              ' Z '-40H ;EOF?

```

```

064B C0          RNZ
064C 322B08     STA      NAEOFLG
064F C9          RET
0650 3620       NAEND   MVI      M, ' '
0652 23          INX      H
0653 05          DCR      B
0654 C25006     JNZ      NAEND
0657 C9          RET
0658 36FF       NAEOF   MVI      M, 0FFH
065A 23          INX      H
065B 05          DCR      B
065C C25806     JNZ      NAEOF
065F 3E01       MVI      A, 1
0661 322B08     STA      NAEOFLG
0664 C9          RET

;
;READ MASTER IN NAME
;
0665 214608     READMI  LXI      H, MIDAT
0668 CD7206     CALL     MINAME ;GET FILE NAME
066B 362C       MVI      M, ', ' ;SEPARATOR
066D 23          INX      H
066E CD7206     CALL     MINAME ;GET DISK NAME
0671 C9          RET

;
;READ MASTER IN, 1 FIELD
;
0672 0608       MINAME  MVI      B, 8
0674 CD8006     CALL     READMIC ;GET CHARS
0677 362E       MVI      M, ' .'
0679 23          INX      H
067A 0603       MVI      B, 3
067C CD8006     CALL     READMIC ;GET TYPE
067F C9          RET

;
;READ CHARS INTO MASTER NAME
;
0680 3A2C08     READMIC LDA      MIEOFLG
0683 B7          ORA      A
0684 C2C306     JNZ      MIEOF
0687 E5          PUSH     H
0688 C5          PUSH     B
                GETMI  GET      MASTIN
0689+CD3401     CALL     GETMASTIN
068C FE0A       CPI      0AH ;IGNORE LF
068E CA8906     JZ       GETMI ;L/F'S
0691 C1          POP      B
0692 E1          POP      H
0693 FE2C       CPI      ', '
0695 CABB06     JZ       MIEND
0698 FE2E       CPI      ' .'
069A CABB06     JZ       MIEND
069D FE0D       CPI      0DH
069F CABB06     JZ       MIEND
06A2 FE1A       CPI      'Z'-40H ;EOF?
06A4 CAC306     JZ       MIEOF

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```

06A7 77          MOV      M,A
06A8 23          INX      H
06A9 05          DCR      B
06AA C28006      JNZ      READMIC
06AD C5          PUSH     B
06AE E5          PUSH     H
                  GET      MASTIN ;GET DELIMITER
06AF+CD3401     CALL     GETMASTIN
06B2 E1          POP      H
06B3 C1          POP      B
06B4 FE1A       CPI      'Z'-40H ;EOF?
06B6 C0          RNZ
06B7 322C08     STA      MIEOFLG
06BA C9          RET
06BB 3620       MIEND    MVI      M,' '
06BD 23          INX      H
06BE 05          DCR      B
06BF C2BB06     JNZ      MIEND
06C2 C9          RET
06C3 36FF       MIEOF    MVI      M,0FFH
06C5 23          INX      H
06C6 05          DCR      B
06C7 C2C306     JNZ      MIEOF
06CA 322C08     STA      MIEOFLG ;SHOW EOF
06CD C9          RET

;
;WRITE AN ENTRY TO MASTER OUT
;ALSO BUMP COUNT OF ENTRIES WRITTEN
;
06CE 21E507     WRITEMO LXI      H,COUNT+3
06D1 7E          BUMP    MOV      A,M ;GET COUNT DIGIT
06D2 FE20       CPI      ' '
06D4 C2D906     JNZ      BUMPNB
06D7 3E30       MVI      A,'0'
06D9 3C          BUMPNB  INR      A
06DA 77          MOV      M,A
06DB FE3A       CPI      '9'+1 ;TIME TO CARRY?
06DD C2E606     JNZ      BUMPD ;..NO, DONE
06E0 3630       MVI      M,'0'
06E2 2B          DCX      H
06E3 C3D106     JMP      BUMP
06E6 215F08     BUMPD   LXI      H,MODAT
06E9 0619       MVI      B,25
06EB 7E          WRMOL   MOV      A,M
06EC FE20       CPI      ' ' ;NULL CHAR?
06EE CAF806     JZ      WRSKIP
06F1 C5          PUSH     B
06F2 E5          PUSH     H
                  IF      NOT TEST
06F3+CDD702     CALL     PUTMASTOUT
                  ELSE
06F6 E1          PUT      CON
06F7 C1          ENDF
                  POP      H

```

```

06F8 23      WRSKIP  INX      H          ;POINT TO NEXT CHAR
06F9 05      DCR      B
06FA C2EB06  JNZ      WRMOL    ;LOOP UNTIL DONE
06FD 3E0D    MVI      A,0DH
             IF      NOT TEST
             PUT      MASTOUT
06FF+CDD702 CALL      PUTMASTOUT
             ELSE
             PUT      CON
             ENDIF
0702 3E0A    MVI      A,0AH
             IF      NOT TEST
             PUT      MASTOUT
0704+CDD702 CALL      PUTMASTOUT
             ELSE
             PUT      CON
             ENDIF
0707 C9      RET

;
;PRINT MESSAGE IN DE, THEN NAME IN HL
;
0708 E5      MSG     PUSH     H
0709 0E09    MVI      C,@MSG
070B CD0500  CALL     @BDOS
070E E1      POP     H
070F 060C    MVI      B,12    ;NAME + '.' + TYPE
0711 E5      MESGL  PUSH     H
0712 C5      PUSH     B
0713 7E      MOV     A,M     ;GET CHAR
0714 FE20    CPI     ' '
0716 CA2107  JZ      MESGS   ;SKIP IF ' '
             PUT     CON
0719+F5     PUSH     PSW
071A+0E02   MVI     C,@CON
071C+5F     MOV     E,A
071D+CD0500 CALL     @BDOS
0720+F1     POP     PSW
0721 C1      MESGS  POP     B
0722 E1      POP     H
0723 23      INX     H
0724 05      DCR     B
0725 C21107  JNZ     MESGL
0728 3E0D    MVI     A,0DH
             PUT     CON
072A+F5     PUSH     PSW
072B+0E02   MVI     C,@CON
072D+5F     MOV     E,A
072E+CD0500 CALL     @BDOS
0731+F1     POP     PSW
0732 3E0A    MVI     A,0AH
             PUT     CON
0734+F5     PUSH     PSW
0735+0E02   MVI     C,@CON
0737+5F     MOV     E,A
0738+CD0500 CALL     @BDOS
073B+F1     POP     PSW

```

```

073C C9          RET
;
;MOVE SUBROUTINE (DE)=>(HL), LEN IN (B)
;
073D 1A    MOVER    LDAX    D
073E 77          MOV     M,A
073F 13          INX     D
0740 23          INX     H
0741 05          DCR     B
0742 C23D07      JNZ     MOVER
0745 C9          RET
;
;COMPARE ROUTINE (DE)<=>(HL), LENGTH IN B
;
0746 1A    COMPR    LDAX    D
0747 BE          CMP     M
0748 C0          RNZ          ;RET W/NON ZERO SET
0749 13          INX     D
074A 23          INX     H
074B 05          DCR     B
074C C24607      JNZ     COMPR
074F C9          RET          ;ZERO SET, SHOWS =
;
;ALL DONE - WRITE EOF TO OUTPUT, RETURN
;
0750 =    ALLDONE EQU    $
0750 3E1A    MVI     A,'Z'-40H ;EOF CHAR
          IF     NOT TEST
          PUT    MASTOUT
0752+CDD702 CALL    PUTMASTOUT
          FINIS  MASTOUT
0755+2AD202 LHLD   MASTOUTPTR
0758+7D      MOV     A,L
0759+E67F    ANI     (@SECT-1) AND 0FFH
075B+C26107 JNZ     ??0035
075E+22D002 SHLD   MASTOUTLEN
0761+3E1A    ??0035: MVI     A,EOF
0763+F5      PUSH   PSW
0764+CDD702 CALL    PUTMASTOUT
0767+F1      POP    PSW
0768+C25507 JNZ     ??0034
076B+0E10    MVI     C,@CLS
076D+11AD02 LXI     D,FCBMASTOUT
0770+CD0500 CALL    @BDOS
0773+3C      INR     A
0774+C29907 JNZ     ??0037
0777+0E09    MVI     C,@MSG
0779+118207 LXI     D,??0036
077C+CD0500 CALL    @BDOS
077F+C39907 JMP     ??0037
0782+0D0A    ??0036: DB     CR,LF
0784+43414E4E4F DB     'CANNOT CLOSE MASTOUT'
0798+24      DB     '$'
          ENDIF
;
;RUN WAS SUCCESSFUL - SET FINAL FILE DISPOSITIONS

```



```

;
0799+0E13      ERASE   BAK           ;ERA CAT.BAK
079B+11A603    MVI     C,@DEL
079E+CD0500    LXI     D,FCBBAK
                CALL    @BDOS
07A1+0E13      ERASE   NAMES           ;ERA NAMES.SUB
07A3+11DC01    MVI     C,@DEL
07A6+CD0500    LXI     D,FCBNAMES
                CALL    @BDOS
07A9+C3C007    RENAME  BAK,MASTIN      ;REN MAST.BAK=MAST.CAT
                JMP     ??0038
07AC+E5        PUSH    H
07AD+011000    LXI     B,16
07B0+09        DAD     B
07B1+1A        ??0039: LDAX   D
07B2+77        MOV     M,A
07B3+13        INX    D
07B4+23        INX    H
07B5+0D        DCR    C
07B6+C2B107    JNZ     ??0039
07B9+D1        POP    D
07BA+0E17      MVI     C,@REN
07BC+CD0500    CALL    @BDOS
07BF+C9        RET
07C0+210A01    LXI     H,FCBMASTIN
07C3+11A603    LXI     D,FCBBAK
07C6+CDAC07    CALL    @RENS
                RENAME  MASTIN,MASTOUT ;REN MAST.CAT=MAST.NEW
07C9+21AD02    LXI     H,FCBMASTOUT
07CC+110A01    LXI     D,FCBMASTIN
07CF+CDAC07    CALL    @RENS
07D2 CDF007    CALL    MSGXIT
07D5 4D4153542E DB     'MAST.CAT HAS '
07E2 2020202020COUNT DB     ' ENTRIES.$'

;
07F0 D1        MSGXIT POP    D           ;GET MSG
07F1 0E09      MVI     C,@MSG
07F3 CD0500    CALL    @BDOS
07F6 C30000    EXIT   JMP    $-$           ;TO CP/M RETURN ADDR
07F9          DS     32H       ;STACK SPACE
082B =        STACK EQU    $
082B 00       NAEOFLG DB     0           ;NAME FILE EOF FLAG
082C 00       MIEOFLG DB     0           ;MASTER IN EOF FLAG
082D 5858585858NADAT DB     'XXXXXXXX.YYY,'
                ;DKNAME DB     ' . '
083A 2020202020DKNAME DB     ' . '
0843 202020    NEW     DB     ' '
0846 5858585858MIDAT DB     'XXXXXXXX.YYY,'
0853 5858585858MIDSK DB     'XXXXXXXX.YYY'
085F 5858585858MODAT DB     'XXXXXXXX.YYY,XXXXXXXX.YYY'
0878 2424242020SUBNAME DB     '$$$ .SUB'
                ;NAMES TO BE IGNORED READ IN HERE:
0884 29       IGNORE DB     ')'           ;DUMMY END OF TABLE
0885          DS     IGNSIZE
0C85 =        BUFFERS EQU    $
4885 =        MEMSIZE EQU    BUFFERS+@NXTB

```