



```

RRRRRRR      EEEEEEEEE  AAAAAA  DDDDDDD
RRRRRRR      EEEEEEEEE  AAAAAA  DDDDDDD
RR      RR    EE          AA      AA  DD      DD
RR      RR    EE          AA      AA  DD      DD
RR      RR    EE          AA      AA  DD      DD
RR      RR    EE          AA      AA  DD      DD
RRRRRRR      EEEEEEEEE  AA      AA  DD      DD
RRRRRRR      EEEEEEEEE  AA      AA  DD      DD
RR      RR    EE          AAAAAAAAAA DD      DD
RR      RR    EE          AAAAAAAAAA DD      DD
RR      RR    EE          AA      AA  DD      DD
RR      RR    EE          AA      AA  DD      DD
RR      RR    EEEEEEEEE  AA      AA  DDDDDDD
RR      RR    EEEEEEEEE  AA      AA  DDDDDDD

```

```

....
....
....
....

```

```

LL          IIIIII  SSSSSSS
LL          IIIIII  SSSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SSSSSS
LL          II      SSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LLLLLLLLLL IIIIII  SSSSSSS
LLLLLLLLLL IIIIII  SSSSSSS

```

```

1 0001 0 MODULE MAIL$READ( %TITLE 'DISPLAY THE CURRENT MESSAGE'
2 0002 0 IDENT = 'V04-000' ) =
3 0003 1 BEGIN
4 0004 1
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 **
31 0031 1 FACILITY: VAX/VMS MAIL UTILITY
32 0032 1
33 0033 1 ABSTRACT: DISPLAY THE TEXT IN THE CURRENT MAIL MESSAGE.
34 0034 1
35 0035 1 ENVIRONMENT: NATIVE/USER MODE
36 0036 1
37 0037 1 AUTHOR: LEN KAWELL, CREATION DATE: 21-APR-1978
38 0038 1
39 0039 1 MODIFIED BY:
40 0040 1
41 0041 1 V03-014 ROP0018 Robert Posniak 3-JUL-1984
42 0042 1 Ensure that new mail count does not get
43 0043 1 decremented if not reading from default
44 0044 1 message file.
45 0045 1
46 0046 1 V03-013 ROP0005 Robert Posniak 8-JUN-1984
47 0047 1 Ensure that read terminates when message ends
48 0048 1 at bottom of scope.
49 0049 1
50 0050 1 V03-012 BLS0280 Benn Schreiber 4-MAR-1984
51 0051 1 Form feed as last character was producing odd behavior.
52 0052 1
53 0053 1 V03-011 BLS0255 Benn Schreiber 28-Dec-1983
54 0054 1 New global flags
55 0055 1
56 0056 1 V03-010 BLS0246 Benn Schreiber 8-Nov-1983
57 0057 1 Change interface to decrement new mail count. Remove

```

```
58      0058 1      translation table and put in dynamic memory to shrink image.
59      0059 1
60      0060 1      V03-009 BLS0235      Benn Schreiber      23-Aug-1983
61      0061 1      Remove cr/Lf filtering for isam files, it's done
62      0062 1      by the get line routine.
63      0063 1
64      0064 1      V03-008 BLS0229      Benn Schreiber      16-Jul-1983
65      0065 1      Change new mail count handling.
66      0066 1
67      0067 1      V03-007 BLS0224      Benn Schreiber      1-Jun-1983
68      0068 1      Clear held record if reading new message.
69      0069 1
70      0070 1      V03-006 BLS0220      Benn Schreiber      30-Apr-1983
71      0071 1      Use a translate table and MOVTC to do the filtering
72      0072 1
73      0073 1      V03-005 BLS0217      Benn Schreiber      13-Apr-1983
74      0074 1      Filter CSI on output. Move folder name to right corner.
75      0075 1
76      0076 1      V03-004 BLS0214      Benn Schreiber      27-Mar-1983
77      0077 1      Ensure that isam read always gets FROM line without
78      0078 1      date in it. Filter ^N and ^O (SI/SO) from output also.
79      0079 1
80      0080 1      V03-003 BLS0211      Benn Schreiber      13-Mar-1983
81      0081 1      Support ISAM mail files. Handle CTRL/C during displaying
82      0082 1      the message. Filter out the ESCAPE character from text.
83      0083 1
84      0084 1      V03-002 BLS0189      Benn Schreiber      18-Oct-1982
85      0085 1      Set flag that message has been read
86      0086 1
87      0087 1      V03-001 BLS0177      Benn Schreiber      21-Jun-1982
88      0088 1      Use MAIL$G_OUTCHAR rather than INPCHAR
89      0089 1
90      0090 1      --
```

```

0091 1 |
0092 1 | TABLE OF CONTENTS:
0093 1 |
0094 1 |
0095 1 |
0096 1 | INCLUDE FILES:
0097 1 |
0098 1 |     LIBRARY 'SYSS$LIBRARY:STARLET';
0099 1 |     REQUIRE 'SRCS:MAILREQ';
0245 1 |     LIBRARY 'LIBS:MAILDEF';
0246 1 |
0247 1 | MACROS:
0248 1 |
0249 1 |
0250 1 |
0251 1 | EQUATED SYMBOLS:
0252 1 |
0253 1 |
0254 1 |
0255 1 | OWN STORAGE:
0256 1 |
0257 1 | OWN
0258 1 |     DYN_DESC : DYN_DESC_DECL;           !Local dynamic string
0259 1 |
0260 1 |
0261 1 | EXTERNAL REFERENCES:
0262 1 |
0263 1 |
0264 1 | EXTERNAL ROUTINE
0265 1 |     LIB$GET_VM,                          ! Allocate virtual memory
0266 1 |     MAIL$CMD_ERASE,                       ! Erase the screen
0267 1 |     MAIL$DECR_NEWMAIL,                   ! Decrement new mail count
0268 1 |     MAIL$GET_MSG,                        ! Get next message record
0269 1 |     MAIL$GETMSG,                         ! Get text for signal value
0270 1 |     MAIL$GET_I_MSG,                      ! Get next ISAM message record
0271 1 |     MAIL$INFO_I_MSG,                    ! Get info about ISAM msg
0272 1 |     MAIL$NEW_MSG,                       ! Test if message is 'new'
0273 1 |     MAIL$PUT_OUTPUT,                    ! Put to SYSS$OUTPUT
0274 1 |
0275 1 | EXTERNAL
0276 1 |     MAIL$T_RD_RAB,                       ! Rab for mail file i/o
0277 1 |     MAIL$C_FLAGS : $BBLOCK,              ! Control flags
0278 1 |     MAIL$B_MSGTRAN : BYTE,              ! Transition for GET_I_MSG
0279 1 |     MAIL$L_OUTDEVDP,                     ! Output device dependent info
0280 1 |     MAIL$L_OUTLINES,                     ! Number of lines per page
0281 1 |     MAIL$L_CURMSG : REF $BBLOCK,         ! Current message descriptor
0282 1 |     MAIL$Q_CURFOLDER : $BBLOCK,         ! Current ISAM folder name
0283 1 |     MAIL$Q_MSG_FILE : BLOCK[,BYTE],     ! Current message file name
0284 1 |     MAIL$L_MSG_NUM : LONG,              ! Current message number
0285 1 |     MAIL$L_MSG_STS,                      ! message reading status
0286 1 |     MAIL$W_MSG_RSIZ : WORD,              ! Current message record size
0287 1 |     MAIL$L_MSG_RADR : LONG,             ! Current message record addr
0288 1 |     MAIL$Q_USERNAME : BLOCK[,BYTE];     ! User's username
0289 1 |
0290 1 | OWN
0291 1 |     TRANSTABLE : REF VECTOR[,BYTE];

```

```

149 0292 1 GLOBAL ROUTINE MAIL$FILTER_OUTPUT (DESC) =
150 0293 1 |++
151 0294 1 | FUNCTIONAL DESCRIPTION:
152 0295 1 |
153 0296 1 |     Accepts a descriptor and converts escape, SI, and SO characters in
154 0297 1 |     the string to '$'. The resulting string is then output.
155 0298 1 | --
156 0299 2 BEGIN
157 0300 2
158 0301 2 MAP
159 0302 2     DESC : REF $BBLOCK;
160 0303 2
161 0304 2 LOCAL
162 0305 2     PTR : REF VECTOR[ BYTE],
163 0306 2     OUTDESC : VECTOR[2, LONG],
164 0307 2     OUTBUF : $BBLOCK[2048];
165 0308 2
166 0309 2 IF .TRANSTABLE EQL 0
167 0310 2 THEN BEGIN
168 P 0311 3     IF_ERR(LIB$GET_VM(%REF(256), TRANSTABLE));
169 0312 3         RETURN SIGNAL(.STATUS);
170 0313 3     INCRU I FROM 0 TO 255
171 0314 3         DO TRANSTABLE[I] = .I;
172 0315 3     TRANSTABLE[ESC] = %C'$';
173 0316 3     TRANSTABLE[%C'N'-%X'40'] = %C'$';
174 0317 3     TRANSTABLE[%C'O'-%X'40'] = %C'$';
175 0318 3     TRANSTABLE[%X'9B'] = %C'$';
176 0319 2     END;
177 0320 2 OUTDESC[0] = .DESC[DSC$W_LENGTH];
178 0321 2 OUTDESC[1] = OUTBUF;
179 0322 2 CH$TRANSLATE(.TRANSTABLE, .DESC[DSC$W_LENGTH], .DESC[DSC$A_POINTER], 0,
180 0323 2     .DESC[DSC$W_LENGTH], OUTBUF);
181 0324 2 RETURN MAIL$PUT_OUTPUT(OUTDESC)
182 0325 1 END;

```

```

.TITLE  MAILSREAD DISPLAY THE CURRENT MESSAGE
.IDENT  \V04-000\
.PSECT  $OWNS,NOEXE,2

```

```

00# 0000 DYN_DESC:
02 0E 0002 .BYTE 0[2]
    0004 .BYTE 14, 2
    0008 TRANSTABLE:
    .BLKB 4

```

```

.EXTRN  LIB$GET_VM, MAIL$CMD_ERASE
.EXTRN  MAIL$DECR_NEWMAIL
.EXTRN  MAIL$GET_MSG, MAIL$GETMSG
.EXTRN  MAIL$GET_I_MSG, MAIL$INFO_I_MSG
.EXTRN  MAIL$NEW_MSG, MAIL$PUT_OUTPUT
.EXTRN  MAIL$RD_RAB, MAIL$GL_FLAGS
.EXTRN  MAIL$B_MSGTRAN, MAIL$OUTDEVDP
.EXTRN  MAIL$OUTLINES
.EXTRN  MAIL$CURMSG, MAIL$CURFOLDER

```

			007C 00000		.EXTRN MAIL\$Q_MSG_FILE	
			00 9E 00002		.EXTRN MAIL\$L_MSG_NUM, MAIL\$L_MSG_STS	
			CE 9E 00009		.EXTRN MAIL\$W_MSG_RSIZ	
			66 D5 C000E		.EXTRN MAIL\$L_MSG_RADR	
			40 12 00010		.EXTRN MAIL\$Q_USERNAME	
			56 DD 00012		.PSECT \$CODE\$,NOWRT,2	
04	AE	0100	8F 3C 00014		.ENTRY MAIL\$FILTER_OUTPUT, Save R2,R3,R4,R5,R6	0292
		04	AE 9F 0001A		MOVAB TRANSTABLE, R6	
00000000G	00		02 FB 0001D		MOVAB -2060(SP), SP	
	0A		50 EB 00024		TSTL TRANSTABLE	0309
00000000G	00		50 DD 00027		BNEQ 3\$	
			01 FB 00029		PUSHL R6	0312
			04 00030		MOVZWL #256, 4(SP)	
			66 D0 00031 1\$:		PUSHAB 4(SP)	
			51 D4 00034		CALLS #2, LIB\$GET_VM	
			51 90 00036 2\$:		BLBS STATUS, 1\$	
			51 D1 0003A		PUSHL STATUS	
			F3 1B 00041		CALLS #1, LIB\$SIGNAL	
			24 90 00043		RET	
			8F B0 00047		MOVL TRANSTABLE, R0	0314
			24 90 0004D		CLRL I	
			AC D0 00052 3\$:		MOVB I, (I)+[R0]	
			60 3C 00056		CMLL I, #255	
			AE 9E 0005A		BLEQU 2\$	
			66 D0 0005F		MOVB #36, 27(R0)	0315
			60 2E 00062		MOVW #9252, 14(R0)	0316
			60 00068		MOVB #36, 155(R0)	0318
			AD 9F 0006B		MOVL DESC, R0	0320
			01 FB 0006E		MOVZWL (R0), OUTDESC	
			04 00075		MOVAB OUTBUF, OUTDESC+4	0321
61	00				MOVL TRANSTABLE, R1	0322
					MOVTC (R0), @4(R0), #0, (R1), (R0), OUTBUF	
					PUSHAB OUTDESC	0324
					CALLS #1, MAIL\$PUT_OUTPUT	
					RET	0325

; Routine Size: 118 bytes, Routine Base: \$CODE\$ + 0000

```

184 0326 1 ROUTINE SEQ_READ(LINESPP) : NOVALUE =
185 0327 2 BEGIN
186 0328 2
187 0329 2 LOCAL
188 0330 2     DESC : $BBLOCK[DSC$C_S_BLN],
189 0331 2     NUMLINES;
190 0332 2
191 0333 2 NUMLINES = .LINESPP;
192 0334 2
193 0335 2 : Loop, displaying each record and getting the next one, until the
194 0336 2 : screen is filled or there aren't any more records
195 0337 2
196 0338 2 DO
197 0339 2     BEGIN
198 0340 2     DESC[DSC$B_DTYPE] = DESC[DSC$B_CLASS] = 0;
199 0341 2     DESC[DSC$W_LENGTH] = .MAIL$W_MSG_RSIZ;
200 0342 2     DESC[DSC$A_POINTER] = .MAIL$C_MSG_RADR;
201 0343 2     IF .MAIL$W_MSG_RSIZ GEQU 2
202 0344 2     AND (.MAIL$C_MSG_RADR + .MAIL$W_MSG_RSIZ - 2) < 0,16 > EQLU (CR OR LF^8)
203 0345 2     THEN DESC[DSC$W_LENGTH] = .DESC[DSC$W_LENGTH] - 2;
204 0346 2     MAIL$FILTER_OUTPUT(DESC);
205 0347 2     IF .MAIL$GL_FLAGS[MAIF_V_CTRLCLF]
206 0348 2     THEN
207 0349 2         RETURN;
208 0350 2     IF NOT MAIL$GET_MSG()
209 0351 2     THEN
210 0352 2         RETURN;
211 0353 2
212 0354 2     : Check if output device is a scope terminal
213 0355 2
214 0356 2     IF .MAIL$GL_FLAGS[MAIF_V_SCOPE]
215 0357 2     THEN
216 0358 2         BEGIN
217 0359 2         : Check if first character of record is a form-feed
218 0360 2
219 0361 2         IF (.MAIL$W_MSG_RSIZ NEQ 0) AND
220 0362 2         (CHRCHAR(.MAIL$C_MSG_RADR) EQLU FF)
221 0363 2         THEN
222 0364 2
223 0365 2         : Skip over the form-feed. If there is nothing left
224 0366 2         : in the record, get another one. If there is data
225 0367 2         : left, tell user there is more and exit.
226 0368 2
227 0369 2         BEGIN
228 0370 2         MAIL$W_MSG_RSIZ = .MAIL$W_MSG_RSIZ - 1;
229 0371 2         MAIL$C_MSG_RADR = .MAIL$C_MSG_RADR + 1;
230 0372 2         IF .MAIL$W_MSG_RSIZ EQL 0
231 0373 2         THEN BEGIN
232 0374 2             IF MAIL$GET_MSG()
233 0375 2             THEN
234 0376 2                 MAIL$PUT_OUTPUT(MAIL$GETMSG(MAIL$MOREMSG),0);
235 0377 2             END
236 0378 2         ELSE
237 0379 2             MAIL$PUT_OUTPUT(MAIL$GETMSG(MAIL$MOREMSG),0);
238 0380 2         RETURN;
239 0381 2         END;
240 0382 2

```

```

: 241 0383 4          NUMLINES = .NUMLINES - 1;      ! Decrement number lines page
: 242 0384 4          END
: 243 0385 3          END
: 244 0386 2 UNTIL .NUMLINES LEQ 0;
: 245 0387 2 MAIL$PUT_OUTPUT(MAIL$GETMSG(MAIL$_MOREMSG),0);      ! Tell user there is more
: 246 0388 2 RETURN;
: 247 0389 1 END;

```

003C 00000 SEQ\_READ:

```

          55 00000000G 00 9E 00002      .WORD      Save R2,R3,R4,R5      : 0326
          54 00000000G 00 9E 00009      MOVAB      MAIL$GET_MSG, R5
          53 00000000G 00 9E 00010      MOVAB      MAIL$MSG_RADR, R4
          5E          08 C2 00017      MOVAB      MAIL$MSG_RSIZ, R3
          52          04 AC D0 0001A      SUBL2      #8, SP
          51          63 3C 0001E 1$:    MOVL      LINESPP, NUMLINES      : 0333
          6E          51 3C 00021      MOVZWL    MAIL$MSG_RSIZ, R1      : 0341
          50          64 D0 00024      MOVZWL    R1, DESC
          04 AE          50 D0 00027      MOVL      MAIL$MSG_RADR, R0      : 0342
          02          51 B1 0002B      MOVL      R0, DESC+4
          0E          0E 1F 0002E      CMPW      R1, #2      : 0343
          FE A140 9F 00030      BLSSU     2$
          0A0D 8F          9E B1 00034      PUSHAB    -2(R1)[R0]      : 0344
          03          03 12 00039      CMPW      @(SP)+, #2573
          6E          02 A2 0003B      BNEQ      2$
          FF45 CF          5E DD 0003E 2$:  SUBW2     #2, DESC      : 0345
          47 00000000G 00 E8 00045      PUSHL     SP      : 0346
          65          00 FB 0004C      CALLS     #1, MAIL$FILTER_OUTPUT
          41          50 E9 0004F      BLBS      MAIL$GL_FLAGS+1, 6$
          1D 00000000G 00 04 E1 00052      CALLS     #0, MAIL$GET_MSG      : 0347
          63          63 B5 0005A      BLBC      R0, 6$      : 0350
          17          17 13 0005C      BLB      #4, MAIL$GL_FLAGS, 4$
          50          64 D0 0005E      TSTW     MAIL$MSG_RSIZ      : 0356
          0C          60 91 00061      BEQL      3$      : 0362
          0F          0F 12 00064      MOVL      MAIL$MSG_RADR, R0
          63          63 B7 00066      CMPB     (R0), #12      : 0363
          64          64 D6 00068      BNEQ      3$
          63          63 B5 0006A      DECW     MAIL$MSG_RSIZ      : 0371
          0D          0D 12 0006C      INCL     MAIL$MSG_RADR      : 0372
          65          00 FB 0006E      TSTW     MAIL$MSG_RSIZ      : 0373
          07          50 E8 00071      BNEQ      5$
          04          04 00074      CALLS     #0, MAIL$GET_MSG      : 0375
          52          52 D7 00075 3$:    RET
          52          52 D5 00077 4$:    RET
          A3          A3 14 00079      DECL     NUMLINES      : 0380
          7E          7E D4 0007B 5$:    TSTL     NUMLINES      : 0383
          8F          8F DD 0007D      BGTR     1$      : 0386
          00000000G 00 07EDDC0 7E D4 0007B 5$:    CLRL     -(SP)      : 0387
          00000000G 00          8F DD 0007D      PUSHL     #8314304
          50          01 FB 00083      CALLS     #1, MAIL$GETMSG
          02          50 DD 0008A      PUSHL     R0
          04          02 FB 0008C      CALLS     #2, MAIL$PUT_OUTPUT
          04 00093 6$:    RET      : 0389

```



```
249 0390 1 ROUTINE ISAM_READ (LINESPP) : NOVALUE =
250 0391 1 |++
251 0392 1 | FUNCTIONAL DESCRIPTION:
252 0393 1 |
253 0394 1 |     Displays records of current message that will fit on the current
254 0395 1 |     screen [ISAM files only]
255 0396 1 | --
256 0397 1 |
257 0398 2 BEGIN
258 0399 2
259 0400 2 OWN
260 0401 2     HOLD_DESC : $BBLOCK[DSC$C_S_BLN];
261 0402 2
262 0403 2 LOCAL
263 0404 2     DESC : $BBLOCK[DSC$C_S_BLN],
264 0405 2     MORE_FLAG,
265 0406 2     NUMLINES;
266 0407 2
267 0408 2 INIT_SDESC(DESC);
268 0409 2 IF .MAIL$B MSGTRAN EQL MMB C FROM
269 0410 2     THEN MAIL$B MSGTRAN = MMB C FROMXDT;
270 0411 2 IF .MAIL$B MSGTRAN EQL MMB C FROMXDT
271 0412 2     THEN MAIL$GL FLAGS[MAIF_V_RDHOLD] = FALSE;
272 0413 2 NUMLINES = .LINESPP;
273 0414 2
274 0415 2 | Loop reading records until end of page or end of message
275 0416 2
276 0417 3 WHILE (IF NOT .MAIL$GL FLAGS[MAIF_V_RDHOLD]
277 0418 3     THEN MAIL$GET Y MSG(DESC, MORE_FLAG)
278 0419 3     ELSE (DESC[DSC$W_LENGTH] = .HOLD_DESC[DSC$W_LENGTH];
279 0420 3     DESC[DSC$A_POINTER] = .HOLD_DESC[DSC$A_POINTER];
280 0421 3     NOT (MAIL$GL_FLAGS[MAIF_V_RDHOLD] = FALSE)))
281 0422 3 DO BEGIN
282 0423 3 |
283 0424 3 |     If output is a scope, then handle form-feeds
284 0425 3 |
285 0426 3 IF .MAIL$GL FLAGS[MAIF_V_SCOPE]
286 0427 3     AND .DESC[DSC$W_LENGTH] NEQ 0
287 0428 3 THEN IF CH$RCHAR(.DESC[DSC$A_POINTER]) EQLU FF
288 0429 3     THEN BEGIN
289 0430 3         DESC[DSC$W_LENGTH] = .DESC[DSC$W_LENGTH] - 1;
290 0431 3         DESC[DSC$A_POINTER] = .DESC[DSC$A_POINTER] + 1;
291 0432 3         IF .DESC[DSC$W_LENGTH] GTRU 0
292 0433 3             THEN BEGIN
293 0434 3                 HOLD_DESC[DSC$W_LENGTH] = .DESC[DSC$W_LENGTH];
294 0435 3                 HOLD_DESC[DSC$A_POINTER] = .DESC[DSC$A_POINTER];
295 0436 3                 MAIL$GL_FLAGS[MAIF_V_RDHOLD] = TRUE;
296 0437 3                 MAIL$PUT_OUTPUT(MAIL$GETMSG(MAIL$_MOREMSG), 0);
297 0438 3                 END
298 0439 3             ELSE BEGIN
299 0440 3                 IF .MORE_FLAG
300 0441 3                     THEN MAIL$PUT_OUTPUT(MAIL$GETMSG(MAIL$_MOREMSG), 0)
301 0442 3                     ELSE MAIL$_MSG_STS = 0;
302 0443 3                 END;
303 0444 3             RETURN;
304 0445 3             END;
305 0446 3 MAIL$FILTER_OUTPUT(DESC);
```

```

: 306      0447 3      IF .MAIL$GL_FLAGS[MAIF_V_CTRL CFL]
: 307      0448 3      THEN RETURN;
: 308      0449 3      NUMLINES = .NUMLINES - 1;
: 309      0450 3      IF .NUMLINES LEQ 0 AND .MORE FLAG
: 310      0451 3      THEN (MAIL$PUT_OUTPUT(MAIL$GETMSG(MAIL$_MOREMSG),0); RETURN);
: 311      0452 2      END;
: 312      0453 1      END;

```

.PSECT \$OWNS,NOEXE,2

```

0000C HOLD_DESC:
      .BLKB 8

```

.PSECT \$CODE\$,NOWRT,2

003C 00000 ISAM\_READ:

					.WORD	Save R2,R3,R4,R5	: 0390		
	55	00000000G	00	9E	00002	MOVAB	MAIL\$B_MSGTRAN, R5		
	54	00000000'	00	9E	00009	MOVAB	HOLD_DESC, R4		
	53	00000000G	00	9E	00010	MOVAB	MAIL\$GL_FLAGS, R3		
	5E		0C	C2	00017	SUBL2	#12, SP		
			04	AE	7C	0001A	CLRQ	DESC	: 0408
	01		65	91	0001D	CMPB	MAIL\$B_MSGTRAN, #1	: 0409	
			03	12	00020	BNEQ	1\$		
	65		06	90	00022	MOVB	#6, MAIL\$B_MSGTRAN	: 0410	
	06		65	91	00025	1\$: CMPB	MAIL\$B_MSGTRAN, #6	: 0411	
			03	12	00028	BNEQ	2\$		
	63		20	8A	0002A	BICB2	#32, MAIL\$GL_FLAGS	: 0412	
	52		04	AC	D0	0002D	2\$: MOVL	LINESPP, NUMLINES	: 0413
10	63		05	E0	00031	3\$: BBS	#5, MAIL\$GL_FLAGS, 4\$	: 0417	
			5E	DD	00035	PUSHL	SP	: 0418	
			08	AE	9F	00037	PUSHAB	DESC	
	00000000G	00	02	FB	0003A	CALLS	#2, MAIL\$GET_I_MSG		
		0D	50	E8	00041	BLBS	R0, 5\$		
					04	00044	RET		
	04	AE	64	B0	00045	4\$: MOVW	HOLD_DESC, DESC	: 0419	
	08	AE	04	A4	D0	00049	MOVL	HOLD_DESC+4, DESC+4	: 0420
		63	20	8A	0004E	BICB2	#32, MAIL\$GL_FLAGS	: 0421	
2E		63	04	E1	00051	5\$: BBC	#4, MAIL\$GL_FLAGS, 7\$	: 0426	
			04	AE	B5	00055	TSTW	DESC	: 0427
			29	13	00058	BEQL	7\$		
		0C	08	BE	91	0005A	CMPB	@DESC+4, #12	: 0428
			23	12	0005E	BNEQ	7\$		
			04	AE	B7	00060	DECW	DESC	: 0430
			08	AE	D6	00063	INCL	DESC+4	: 0431
			04	AE	B5	00066	TSTW	DESC	: 0432
			0E	13	00069	BEQL	6\$		
	04	64	04	AE	B0	0006B	MOVW	DESC, HOLD_DESC	: 0434
		A4	08	AE	D0	0006F	MOVL	DESC+4, HOLD_DESC+4	: 0435
		63	20	88	00074	BISB2	#32, MAIL\$GL_FLAGS	: 0436	
			1C	11	00077	BRB	8\$	: 0437	
		19	6E	E8	00079	6\$: BLBS	MORE_FLAG, 8\$	: 0440	
		00000000G	00	D4	0007C	CLRL	MAIL\$B_MSG_STS	: 0442	



```
314 0454 1 GLOBAL ROUTINE MAIL$READ : NOVALUE =
315 0455 1
316 0456 1 !++
317 0457 1 FUNCTIONAL DESCRIPTION:
318 0458 1
319 0459 1 Displays the current record and all the records in the message
320 0460 1 that will fit on the screen/page.
321 0461 1
322 0462 1 INPUTS:
323 0463 1
324 0464 1 MAIL$W_MSG_RSIZ = Size of current message record.
325 0465 1 MAIL$L_MSG_RADR = Address of current message record.
326 0466 1 MAIL$Q_USERNAME = Current user's username.
327 0467 1
328 0468 1 OUTPUTS:
329 0469 1
330 0470 1 Current message text displayed on SYS$OUTPUT.
331 0471 1 --
332 0472 2 BEGIN
333 0473 2
334 0474 2 LOCAL
335 0475 2 NUMLINES;
336 0476 2
337 0477 2 Erase the screen first, in case there is an error in updating, it won't
338 0478 2 be immediately erased
339 0479 2
340 0480 2 IF .MAIL$GL_FLAGS[MAIF_V_ISAM]
341 0481 3 THEN BEGIN
342 0482 3 IF .MAIL$L_CURMSG[MMB_V_EXTFNF]
343 0483 3 THEN MAIL$L_CURMSG[MMB_V_EXTFNF] = FALSE
344 0484 3 ELSE MAIL$CMD_ERASE();
345 0485 3 END
346 0486 2 ELSE MAIL$CMD_ERASE();
347 0487 2
348 0488 2 If this is a 'new' (previously unread) message, decrement user's new
349 0489 2 mail count. Do this only if we are in our default mail file.
350 0490 2
351 0491 2 IF .MAIL$GL_FLAGS[MAIF_V_DFMSG] THEN
352 0492 2 IF MAIL$NEW_MSG()
353 0493 2 THEN MAIL$DECR_NEWMAIL(MAIL$Q_USERNAME);
354 0494 2
355 0495 2 Compute the number of lines per page
356 0496 2
357 0497 2 MAIL$GL_FLAGS[MAIF_V_READ_FL] = 1;
358 0498 2 IF .MAIL$GL_FLAGS[MAIF_V_ISAM]
359 0499 3 THEN BEGIN
360 0500 3 MAIL$INFO I MSG(0,0,DYN DESC);
361 0501 3 MAIL$PUT_OUTPUT($DESCRIPTOR('!4* #!8<!UL!>!3* !20AS!#* !AS'),
362 0502 3 .MAIL$L_MSG_NUM,DYN DESC
363 0503 3 44-.MAIL$Q_CURFOLDER[DSC$W_LENGTH],
364 0504 3 MAIL$Q_CURFOLDER);
365 0505 3 END
366 0506 2 ELSE MAIL$PUT_OUTPUT(DESCRIPTOR('!#* !AS #!UL'),! Display file name and
367 0507 2 72-.MAIL$Q_MSG_FILE[DSC$W_LENGTH],
368 0508 2 MAIL$Q_MSG_FILE ! message number
369 0509 2 .MAIL$C_MSG_NUM);
370 0510 2 NUMLINES = MAX(.MAIL$L_OUTLINES-5,1);
```

```

: 371      0511 2 IF .MAIL$GL_FLAGS[MAIF V ISAM]
: 372      0512 2   THEN ISAM_READ(.NUMLINES)
: 373      0513 2   ELSE SEQ_READ(.NUMLINES);
: 374      0514 2
: 375      0515 2 RETURN
: 376      0516 1 END;

```

```

33 21 3E 21 4C 55 21 3C 38 21 23 20 2A 34 21 001B8 P.AAB: .ASCII \!4* #!8<!UL!>!3* !20AS!#* !AS\
   53 41 21 20 2A 23 21 53 41 30 32 21 20 2A 001C7
                                     001D5
                                     0000001D 001D8 P.AAA: .BLKB 3
                                     00000000' 001DC P.AAA: .LONG 29
                                     00000000' 001E0 P.AAD: .ADDRESS P.AAB
4C 55 21 23 20 53 41 21 20 2A 23 21 001E0 P.AAD: .ASCII \!#* !AS #!UL\
                                     0000000C 001EC P.AAC: .LONG 12
                                     00000000' 001F0 P.AAC: .ADDRESS P.AAD

```

```

                                     01FC 00000 .ENTRY MAIL$READ, Save R2,R3,R4,R5,R6,R7,R8 : 0454
58 00000000G 00 9E 00002 MOVAB MAIL$Q MSG_FILE, R8
57 00000000G 00 9E 00009 MOVAB MAIL$POT OUTPUT, R7
56 00000000G 00 9E 00010 MOVAB MAIL$SL_MSG_NUM, R6
55 00000000G 00 9E 00017 MOVAB MAIL$Q_CURFOLDER, R5
54 00000000' 00 9E 0001E MOVAB DYN_DESC, R4
53          BC AF 9E 00025 MOVAB P.AAA, R3
52 00000000G 00 9E 00029 MOVAB MAIL$GL_FLAGS, R2
12          62 E9 00030 BLBC MAIL$GL_FLAGS, 1$ : 0480
50 00000000G 00 D0 00033 MOVL MAIL$SL_CURMSG, R0 : 0482
06          0A A0 04 E1 0003A BBC #4, 10(R0), 1$
          0A A0 10 8A 0003F BICB2 #16, 10(R0) : 0483
          07 11 00043 BRB 2$
          00 00 FB 00045 1$: CALLS #0, MAIL$CMD_ERASE : 0486
17          01 A2 04 E1 0004C 2$: BBC #4, MAIL$GL_FLAGS+1, 3$ : 0491
          00 00 FB 00051 CALLS #0, MAIL$NEW_MSG : 0492
          0D 50 E9 00058 BLBC R0, 3$
          00000000G 00 9F 00058 PUSHAB MAIL$Q_USERNAME : 0493
          00 01 FB 00061 CALLS #1, MAIL$DECR_NEWMAIL :
          62 40 8F 88 00068 3$: BISB2 #64, MAIL$GL_FLAGS : 0497
          1F 62 E9 0006C BLBC MAIL$GL_FLAGS, 4$ : 0498
          54 DD 0006F PUSHL R4 : 0500
          7E 7C 00071 CLRQ -(SP)
          00000000G 00 03 FB 00073 CALLS #3, MAIL$INFO_I_MSG :
          55 DD 0007A PUSHL R5 : 0501
          7E 65 3C 0007C MOVZWL MAIL$Q_CURFOLDER, -(SP) : 0503
6E          2C 6E C3 0007F SUBL3 (SP), #44, (SP)
          54 DD 00083 PUSHL R4 : 0501
          66 DD 00085 PUSHL MAIL$SL_MSG_NUM : 0502
          53 DD 00087 PUSHL R3 : 0501
          67 05 FB 00089 CALLS #5, MAIL$PUT_OUTPUT :
          15 11 0008C BRB 5$ : 0498
          66 DD 0008E 4$: PUSHL MAIL$SL_MSG_NUM : 0509
          58 DD 00090 PUSHL R8 : 0506
          7E 68 3C 00092 MOVZWL MAIL$Q_MSG_FILE, -(SP) : 0507
6E 00000048 8F 6E C3 00095 SUBL3 (SP), #72, (SP)
          14 A3 9F 0009D PUSHAB P.AAC : 0506

```

MAILSREAD  
V04-000

DISPLAY THE CURRENT MESSAGE

D 5  
16-Sep-1984 01:16:13  
14-Sep-1984 12:42:30

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[MAIL.SRC]READ.B32;1

Page 14  
(6)

MA  
VC

50	00000000G	67	04	FB	000A0	CALLS	#4, MAIL\$PUT_OUTPUT	:	
		00	05	C3	000A3	SUBL3	#5, MAIL\$L_ODTLINES, R0	:	0510
			03	14	000AB	BGTR	6\$	:	
		50	01	D0	000AD	MOVL	#1, R0	:	
		08	62	E9	000B0	BLBC	MAIL\$GL_FLAGS, 7\$	:	0511
			50	DD	000B3	PUSHL	NUMLINES	:	0512
	FESC	CF	01	FB	000B5	CALLS	#1, ISAM_READ	:	
				04	000BA	RET		:	
			50	DD	000BB	PUSHL	NUMLINES	:	0513
	FDCO	CF	01	FB	000BD	CALLS	#1, SEQ_READ	:	
				04	000C2	RET		:	0516

; Routine Size: 195 bytes, Routine Base: \$CODE\$ + 01F4

MAIL\$READ  
V04-000

DISPLAY THE CURRENT MESSAGE

E 5  
16-Sep-1984 01:16:13  
14-Sep-1984 12:42:30

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[MAIL.SRC]READ.B32;1

Page 15  
(7)

: 378  
: 379

0517 1 END  
0518 0 ELUDOM

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
SOWNS	20	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
SCODES	695	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
\$_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	13	0	581	00:00.7
\$_\$255\$DUA28:[MAIL.OBJ]MAILDEF.L32;1	457	10	2	26	00:00.2

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:READ/OBJ=OBJ\$:READ MSRC\$:READ/UPDATE=(ENH\$:READ)

: Size: 635 code + 80 data bytes  
: Run Time: 00:08.8  
: Elapsed Time: 00:36.5  
: Lines/CPU Min: 3547  
: Lexemes/CPU-Min: 25082  
: Memory Used: 98 pages  
: Compilation Complete

