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changes to: (VARS LAFITE-COMMANDSCOMS)

previous date: 23-Feb-2024 21:58:18 {WMEDLEY}<library>lafite>LAFITE-COMMANDS.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

## (RPAQQ LAFITE-COMMANDSCOMS

[;; Handling of the main Lafite browser commands

```
(COMS                                     ; DISPLAY
(FNS \LAFITE.DISPLAY \LAFITE.DO.DISPLAY SELECTMESSAGETODISPLAY MESSAGEDISPLAYER
  LA.COPY.MESSAGE.TEXT \LAFITE.CLOSE.DISPLAYWINDOWS \LAFITE.CLOSE.DISPLAYER)
(FNS \LAFITE.UNHIDE.HEADERS \LAFITE.HIDE.HEADERS \LAFITE.REHIDE.HEADERS
  LAFITE.EAT.UNDESIRABLE.FIELD LAFITE.EAT.GVG \LAFITE.HARDCOPY.FROM.DISPLAY
  LAFITE.HARDCOPY.TAB.WIDTH)
(FNS \LAFITE.SET.LOOKS.FROM.MENU \LAFITE.SET.DEFAULT.LOOKS \LAFITE.SET.FIXED.LOOKS
  LAFITE.SET.LOOKS LAFITE.SET.TAB.LOOKS LAFITE.SET.PARA.SEPARATION LAFITE.SET.LOWER.CASE
  LAFITE.SUBSTITUTE.VP.EOL)
(INITVARS \LAFITE.DISPLAY.COMMANDS)
(ADDVARS [LAFITE.EXTRA.DISPLAY.COMMANDS ("Looks" '\LAFITE.SET.LOOKS.FROM.MENU "Change the
                                         appearance of the selected text, or whole message
                                         if nothing selected")
      ("Hardcopy" '\LAFITE.HARDCOPY.FROM.DISPLAY "Hardcopy this message in its current
                                         appearance")
      ("Unhide" '\LAFITE.UNHIDE.HEADERS "Display the header fields that are hidden from
                                         view." (SUBITEMS ("Hide" '\LAFITE.REHIDE.HEADERS "Hide uninteresting fields
                                         from view again")
      (LAFITE.LOOKS.SUBCOMMANDS ("VP Line Breaks" '\LAFITE.SUBSTITUTE.VP.EOL "Replace the
                                         Viewpoint end of line character with ours.")
      ("Lowercase" '\LAFITE.SET.LOWER.CASE "Lowercase the region or whole message.")
      ("Spread Paragraphs" '\LAFITE.SET.PARA.SEPARATION "Separate paragraphs by 10 points
      (useful for Tioga messages).")
      ("Default" '\LAFITE.SET.DEFAULT.LOOKS "Change selection (or whole text) back to
      default font")
      ("Fixed Width" '\LAFITE.SET.FIXED.LOOKS "Change selection (or whole text) to
      fixed-width font"))))
(GLOBALVARS \LAFITE.DISPLAY.COMMANDS))
(COMS                                     ; DELETE
(FNS LAFITE.DELETE.MESSAGES \LAFITE.DELETE DISPLAYAFTERDELETE \LAFITE.SELECT.NEXT \LAFITE.UNDELETE
  ))
(COMS                                     ; MOVE
(FNS LAFITE.MOVE.MESSAGES \COERCE.TO.MSGLIST \LAFITE.MOVETO \LAFITE.COPYTO \LAFITE.MOVETO.PROC
  \LAFITE.MOVE.MESSAGES.INTERNAL)
      ; Aux move
(FNS \LAFITE.ENABLE.MOVE.MENU \LAFITE.ADD.TO.MOVE.MENU \LAFITE.UPDATE.MOVE.MENU
  \LAFITE.RESTORE.MOVE.MENU \LAFITE.HANDLE.AUTO.MOVE)
(ADDVARS (LAFITEEXTRAMENUITEMS ("Enable MoveTo Menu" '\LAFITE.ENABLE.MOVE.MENU "Attach a menu of
                                         folders for accelerated MoveTo (or modify existing one)"
      (SUBITEMS ("Restore MoveTo Menu" '\LAFITE.RESTORE.MOVE.MENU
      "Just reopen the attached MoveTo menu if it
      existed.")))
      ("Copy To" '\LAFITE.COPYTO "Like MoveTo, but don't delete the message(s)."))
  (LAFITE.EXTRA.MOVE.ITEMS ("---Display---" '\LAFITE.DISPLAY "Display the next message")
  ("---Delete---" '\LAFITE.DELETE "Delete the selected message(s)"))
(INITVARS (LAFITE.AUTO.MOVE.MENU)))
(COMS                                     ; UPDATE
(FNS \LAFITE.UPDATE \LAFITE.EXPUNGE.PROC \LAFITE.UPDATE.PROC \LAFITE.HARDCOPYONLY.PROC
  LAB.CHOOSE.UPDATE.MENU LAB.CREATE.UPDATE.MENU LAB.UPDATE.NEEDED? \LAFITE.START.UPDATE
  LAB.START.COMMAND \LAFITE.FINISH.UPDATE \LAFITE.CLOSE.OTHER.FOLDERS)
(FNS LAB.FLUSHWINDOW LAB.APPENDMESSAGES \LAFITE.COMPACT.FOLDER \LAFITE.COMPACT.FOLDER1
  \LAFITE.COMPACT.FOLDER2 \LAFITE.COMPACT.EXTRA \LAFITE.INVALIDATE.TOC \LAFITE.RENAMEFILE
  SMART-RENAMEFILEP LA.OPENTEMPFILE)
(FNS \LAFITE.UPDATE.FOLDER \LAFITE.UPDATE.CONTENTS \LAFITE.UPDATE.CONTENTS1 WRITETOCENTRY
  WRITETOCMARKBYTES WRITEFOLDERMARKBYTES))
[COMS                                     ; HARDCOPY
(FNS LAFITE.HARDCOPY.MESSAGES \LAFITE.HARDCOPY \LAFITE.HARDCOPY.PROC \LAFITE.HARDCOPY.HEADERS
  \LAFITE.MARK.HARDCOPIED \LAFITE.TRANSMIT.HARDCOPY \LAFITE.HARDCOPY.BODIES
  \LAFITE.APPEND.MESSAGE.BODY \LAFITE.DO.PENDING.HARDCOPY \LAFITE.CANCEL.HARDCOPY
  \LAFITE.CLEAR.HARDCOPY.STATE)
(ADDVARS (LAFITEEXTRAMENUITEMS ("Cancel Pending Hardcopy" '\LAFITE.CANCEL.HARDCOPY "Forget about
                                         hardcopying the messages so far marked for hardcopy.")
[COMS (INITVARS (LAFITEHARDCOPYBATCHFLG NIL)
  (LAFITEHARDCOPY.MIN.TOC NIL)
  (LAFITEDISPLAYAFTERDELETEFLG T)
  (LAFITEMOVETOCONFIRMFLG 'ALWAYS)
  (LAFITENEWPAGEFLG T)
  (LAFITEENDOFMESSAGESTR "-End of message-")
  [LAFITEENDOFMESSAGEFONT (FONTCREATE ' (TIMESROMAN 10 ITALIC]
  (LAFITE.DISPLAY.SIZE ' (500 . 300))
  (LAFITE.BROWSER.LAYOUTS NIL)
```

```

(LAFITE.MIDDLE.UPDATE ' (:EXPUNGE :SHRINK :CONFIRM))
(LAFITEHARDCOPYBATCHSHADE 1025)
(LAFITEHARDCOPYSEPARATOR "%
Next Message -----%
"))
(COMS ; Obsolete
(INITVARS (LAFITEDISPLAYREGION (CREATEREGION 375 25 600 335]
(DECLARE%: DOEVAL@COMPILE DONTCOPY (FILES (SOURCE)
LAFITE-DECLS)
(LOCALVARS . T))
(DECLARE%: DONTEVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILEVARS (ADDVARS (NLAMA)
(NLAML)
(LAMA LAFITE.HARDCOPY.MESSAGES]))

```

:: Handling of the main Lafite browser commands

:: DISPLAY

(DEFINEQ

(\LAFITE.DISPLAY

```

[LAMBDA (WINDOW MAILFOLDER ITEM MENU KEY) ; Edited 22-Sep-87 14:56 by bvm:
(PROG (DISPLAYWINDOW)
(COND
([WINDOWP (SETQ DISPLAYWINDOW (RESETLST
(LA.RESETSHADE ITEM MENU)
(WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of MAILFOLDER)
(\LAFITE.MAYBE.CLEAR.PROMPT MAILFOLDER)
[OR (LAB.ASSURE.SELECTIONS MAILFOLDER)
(LET ((MSGDESCRIPTOR (SELECTMESSAGETODISPLAY WINDOW
MAILFOLDER))
W)
(COND
[MSGDESCRIPTOR (\LAFITE.DO.DISPLAY
MAILFOLDER MSGDESCRIPTOR
(EQ KEY 'MIDDLE]
(T (LAB.PROMPTPRINT MAILFOLDER T "No more
messages.")
; But return current display window for topping, just in case it was
; buried
(CAR (fetch (MAILFOLDER FOLDERDISPLAYWINDOWS)
of MAILFOLDER]))]
; make sure the display window is on top in case SHADEITEM
; put the browser back on top
(TOTOPW DISPLAYWINDOW]))

```

(\LAFITE.DO.DISPLAY

```

[LAMBDA (MAILFOLDER MSGDESCRIPTOR NEWWINDOWFLG)
; Edited 28-Jun-99 10:22 by rmk:
; Edited 27-Jun-99 22:44 by rmk:
; Edited 25-Jun-99 19:05 by rmk:
; Edited 25-Jun-99 18:31 by rmk:
; Edited 13-Oct-87 15:56 by bvm:

```

;;; Display MSGDESCRIPTOR from MAILFOLDER, using a new window if NEWWINDOWFLG is true, else reusing if possible the primary window.  
 ;;; Returns the window.

;;;
 ;;;

;;; rmk, 6/99. I modified the interface to LA.COPY.MESSAGE.TEXT to make it easier to replace that function with something that deals with MIME  
 ;;; attachments. I moved the MAYBEVERIFYMSG up to this level to eliminate a compile-time dependency on that macro, and this required moving the  
 ;;; \LAFITE.OPEN.FOLDER as well. That call is harmlessly repeated in LA.COPY.MESSAGE.TEXT

```

(PROG (TEMPMSG DISPLAYWINDOW)
(LAB.EXPOSEMESSAGE MAILFOLDER MSGDESCRIPTOR)
(replace (MAILFOLDER CURRENTDISPLAYEDMESSAGE) of MAILFOLDER with NIL) ; Clear it here in case of abort
(\LAFITE.OPEN.FOLDER MAILFOLDER 'INPUT :ABORT)
(MAYBEVERIFYMSG MSGDESCRIPTOR MAILFOLDER)
(SETQ TEMPMSG (LA.COPY.MESSAGE.TEXT MAILFOLDER MSGDESCRIPTOR NEWWINDOWFLG))
(SETQ DISPLAYWINDOW (MESSAGEDISPLAYER MAILFOLDER TEMPMSG (CONCAT "Message " (fetch (LAFITEMSG %#)
of MSGDESCRIPTOR)
" from "
(fetch (MAILFOLDER FULLFOLDERNAME)
of MAILFOLDER)
" ["
(fetch (LAFITEMSG MESSAGELENGTH)
of MSGDESCRIPTOR)
" chars]"))
NEWWINDOWFLG))
(SEENMESSAGE MSGDESCRIPTOR MAILFOLDER)
(PROGN
; Cache the stream that we copied the message text to, since we
; might be able to use it to accelerate a Move or Hardcopy.
; Unfortunately, we can't take advantage of it now, since
; NODIRCORE doesn't support multiple streams per file.
(replace (MAILFOLDER CURRENTDISPLAYEDSTREAM) of MAILFOLDER with TEMPMSG)
(replace (MAILFOLDER CURRENTDISPLAYEDMESSAGE) of MAILFOLDER with MSGDESCRIPTOR))

```

(RETURN DISPLAYWINDOW)]

**(SELECTMESSAGETODISPLAY**

[LAMBDA (WINDOW MAILFOLDER)

(\* bvm%: " 1-Mar-86 18:19")

;;; Laurel acts differently if there is currently only one message selected or many about whether it unselects the one that was displayed before. Lafite will follow the same model

```
(LET ((CURRENTDISPLAYEDMSG (fetch (MAILFOLDER CURRENTDISPLAYEDMESSAGE) of MAILFOLDER))
      (MESSAGES (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of MAILFOLDER))
      (FIRST# (fetch (MAILFOLDER FIRSTSELECTEDMESSAGE) of MAILFOLDER))
      (LAST# (fetch (MAILFOLDER LASTSELECTEDMESSAGE) of MAILFOLDER))
      (DISPLAYED# MSGDESCRIPTOR))
  (COND
    ((IGREATERP FIRST# LAST#) ; Nothing selected, so nothing to display
     NIL)
    ((OR (NULL CURRENTDISPLAYEDMSG)
         (NOT (fetch (LAFITEMSG SELECTED?) of CURRENTDISPLAYEDMSG)))
     ; haven't displayed any yet, or displayed one is not part of the
     ; selection
     (NTHMESSAGE MESSAGES FIRST#))
    ((EQ FIRST# LAST#) ; Only one msg selected and it is displayed, so move on to next
     ; undeleted msg
     (\LAFITE.SELECT.NEXT MAILFOLDER (fetch (LAFITEMSG %#) of CURRENTDISPLAYEDMSG)))
    (T ; Multiple selections -- Cycle to the next one
     (NTHMESSAGE MESSAGES (COND
       ((EQ (SETQ DISPLAYED# (fetch (LAFITEMSG %#) of CURRENTDISPLAYEDMSG))
            LAST#) ; Cycle back to first
        FIRST#)
       (T (LAB.FIND.SELECTED.MSG MAILFOLDER (ADD1 DISPLAYED#)
          LAST#]))
```

**(MESSAGEDISPLAYER**

[LAMBDA (MAILFOLDER TEXTFILE TITLE NEWWINDOWFLG)

; Edited 14-Jan-2024 16:33 by rmk  
 ; Edited 24-Jun-99 15:34 by rmk:  
 ; Edited 24-Jun-99 15:32 by rmk:  
 ; Edited 24-Jun-99 15:32 by rmk:  
 ; Edited 6-Aug-93 18:48 by bvm

;;; Displayer for individual messages

```
(LET ((CURRENTWINDOWS (fetch (MAILFOLDER FOLDERDISPLAYWINDOWS) of MAILFOLDER))
      [PROPS `(FONT ,LAFITEDISPLAYFONT)
      (WINDOWPROPS '(READONLY T PROMPTWINDOW DON'T))
      (EOF (GETEOFPTR TEXTFILE))
      TEXTSTREAM DISPLAYWINDOW FILTERED))
  ;; WINDOWPROPS for when we finally give TEdit a window: READONLY in order to avoid TEdit's odd temptation to display an ugly caret at
  ;; the start and prevent mouse actions from yielding "NewEditProcess" menu; PROMPTWINDOW to inhibit attaching a prompt window. Due
  ;; to a TEdit bug, you can't give the PROMPTWINDOW prop when opening without a window or it will try to make the symbol DON'T be the
  ;; promptwindow later on.
  (if (AND \LAPARSE.DONT.DISPLAY.HEADERS (NEQ EOF 0)
       (SETQ FILTERED (LAFITE.NEW.PARSE.HEADER TEXTFILE \LAPARSE.DONT.DISPLAY.HEADERS 0)))
      then ; We will filter some headers out, so put * in title to show this
        (SETQ TITLE (CONCAT "*" TITLE)))
  [COND
    ((AND (NOT NEWWINDOWFLG)
          (SETQ DISPLAYWINDOW (CAR CURRENTWINDOWS)))
     (MAPC (WINDOWPROP DISPLAYWINDOW 'EXTRAWINDOWS NIL)
           (FUNCTION CLOSEW)) ; Get rid of extra windows produced by attachments
     (CLEARW DISPLAYWINDOW)
     (WINDOWPROP DISPLAYWINDOW 'TITLE TITLE))
    (T (SETQ DISPLAYWINDOW (CREATEW (COND
      [(AND (NOT NEWWINDOWFLG)
            (PROGN ; This says where we'd like the primary window to be.
                  (fetch (MAILFOLDER FOLDERDISPLAYREGION) of MAILFOLDER
                        ]
                  (LAFITE.DISPLAY.SIZE
                    ; Global default
                    (GETBOXREGION (CAR LAFITE.DISPLAY.SIZE)
                      (CDR LAFITE.DISPLAY.SIZE)
                      NIL NIL NIL TITLE)))
        TITLE))
      (WINDOWADDDPROP DISPLAYWINDOW 'CLOSEFN (FUNCTION \LAFITE.CLOSE.DISPLAYER))
      (WINDOWPROP DISPLAYWINDOW 'TEDIT.MENU.COMMANDS \LAFITE.DISPLAY.COMMANDS)
      (COND
        [(NOT CURRENTWINDOWS)
         (replace (MAILFOLDER FOLDERDISPLAYWINDOWS) of MAILFOLDER with (if NEWWINDOWFLG
                                     then ; not primary, even though no window previously open
                                     (LIST NIL DISPLAYWINDOW)
                                     else (LIST DISPLAYWINDOW]
        [NEWWINDOWFLG (RPLACD CURRENTWINDOWS (CONS DISPLAYWINDOW (CDR CURRENTWINDOWS))
        (T ; Displaying the primary window for the first time when there are
          ; already secondary windows.
```

```

(RPLACA CURRENTWINDOWS DISPLAYWINDOW] ; Now let TEDIT display it
[COND
  ((EQ EOF 0)
   (LAB.PROMPTPRINT MAILFOLDER "Message is empty"))
  (T [LET (WINDOW)
       (if (NOT FILTERED)
           then ; Go ahead and display it right off.
             (SETQ PROPS (NCONC PROPS WINDOWPROPS))
             (SETQ WINDOW DISPLAYWINDOW))
         (SETQ TEXTSTREAM (OR (CAR (NLSETQ (OPENTEXTSTREAM TEXTFILE WINDOW NIL NIL PROPS)))
                              (PROGN (LAB.PROMPTPRINT MAILFOLDER T "Problems displaying message,
                                  trying unformatted.")
                                      (OPENTEXTSTREAM TEXTFILE WINDOW NIL NIL (LIST* 'CLEARGET T PROPS
                                                                                          ]
                                                                                          )
                                  (if FILTERED
                                      then (if (NOT (= EOF (GETEOFPTR TEXTSTREAM)))
                                              then ; rats, there may have been nschars in the header, so parse it
                                                  ; now more carefully
                                                  (SETQ FILTERED (LAFITE.NEW.PARSE.HEADER TEXTSTREAM \LAPARSE.DONT.DISPLAY.HEADERS
                                                                                          0)))
                                              (\LAFITE.HIDE.HEADERS TEXTSTREAM FILTERED)
                                              ; Now we can display it without a major glitch
                                              (OPENTEXTSTREAM TEXTSTREAM DISPLAYWINDOW NIL NIL WINDOWPROPS)
                                              (TEXTPROP TEXTSTREAM 'FILTERED FILTERED)
                                              ; Remember what's invisible, so we can easily undo it
                                              )
                                      (COND
                                          (LAFITEENDOFMESSAGESTR ; Add "End of message" token. Have to take away READONLY
                                                                  ; for a moment here...
                                          (TEXTPROP TEXTSTREAM 'READONLY NIL)
                                          [SETFILEPTR TEXTSTREAM (SUB1 (SETQ EOF (GETEOFPTR TEXTSTREAM)
                                          (COND
                                              ((NEQ (BIN TEXTSTREAM)
                                                  (CHARCODE EOL)) ; Message doesn't end in EOL, so add one before inserting end
                                                                      ; of message str
                                              (TEDIT.INSERT TEXTSTREAM LAFITEEOL (ADD1 (add EOF 1))
                                                  NIL T)))
                                              (TEDIT.INSERT TEXTSTREAM LAFITEENDOFMESSAGESTR (ADD1 EOF)
                                                  LAFITEENDOFMESSAGEFONT T)
                                              (TEXTPROP TEXTSTREAM 'READONLY T)
                                              (TEDIT.SETSEL TEXTSTREAM 1 0)
                                              (TEXTPROP TEXTSTREAM 'DIRTY NIL)
                                              (AND NIL (\CARET.DOWN)) ; Patch around TEdit bug--probably fixed now
                                          ]
                                          ]
                                          DISPLAYWINDOW])

```

**(LA.COPY.MESSAGE.TEXT**

```

[LAMBDA (MAILFOLDER MSGDESCRIPTOR NEWWINDOWFLG) ; Edited 27-Jun-99 22:47 by rmk:
; Edited 27-Jun-99 22:44 by rmk:
; Edited 25-Jun-99 18:30 by rmk:
(LET (OUTPUTSTREAM (INSTREAM (\LAFITE.OPEN.FOLDER MAILFOLDER 'INPUT :ABORT)))
  (SETQ OUTPUTSTREAM (OPENSTREAM '{NODIRCORE} 'BOTH))
  (COPYBYTES INSTREAM OUTPUTSTREAM (fetch (LAFITEMSG START) of MSGDESCRIPTOR)
    (fetch (LAFITEMSG END) of MSGDESCRIPTOR))
  (CLOSEF OUTPUTSTREAM)
  (OPENSTREAM OUTPUTSTREAM 'INPUT NIL '((ENDOFSTREAMOP \LAFITE.EOF))

```

**(\LAFITE.CLOSE.DISPLAYWINDOWS**

```

[LAMBDA (FOLDER) ; Edited 22-Sep-87 15:36 by bvm:
;; Called when browser closed, to close associated windows.
(PROG ((WINDOWS (fetch (MAILFOLDER FOLDERDISPLAYWINDOWS) of FOLDER))
      W)
  (replace (MAILFOLDER CURRENTDISPLAYEDMESSAGE) of FOLDER with NIL)
  (replace (MAILFOLDER CURRENTDISPLAYEDSTREAM) of FOLDER with NIL)
  (COND
    (WINDOWS (for WINDOW in (CDR WINDOWS) do ; Leave secondary windows open, but disconnect them from
                                                  ; browser
              (WINDOWDELPROP WINDOW 'CLOSEFN (FUNCTION
                                                  \LAFITE.CLOSE.DISPLAYER)))
    (COND
      ((WINDOWP (SETQ W (CAR WINDOWS))) ; Save region for later
       [replace (MAILFOLDER FOLDERDISPLAYREGION) of FOLDER with (APPEND (WINDOWPROP W
                                                                                   'REGION)
                                   (WINDOWDELPROP W 'CLOSEFN (FUNCTION \LAFITE.CLOSE.DISPLAYER))
                                   (CLOSEW W)))
       (replace (MAILFOLDER FOLDERDISPLAYWINDOWS) of FOLDER with NIL])

```

**(\LAFITE.CLOSE.DISPLAYER**

```

[LAMBDA (WINDOW) ; Edited 16-Aug-89 11:27 by bvm
;; called via CLOSEFN when a display window is explicitly closed
(MAPC (WINDOWPROP WINDOW 'EXTRAWINDOWS NIL)

```

```

(FUNCTION CLOSEW))
(for FOLDER in \ACTIVE\LA\FITE\FOLDERS bind THESEWINDOWS when (MEMB WINDOW (SETQ THESEWINDOWS (fetch (MAILFOLDER
                                                                    FOLDERDISPLAYWINDOWS
                                                                    )
                                                                    of FOLDER)))
do
    ; Do we need a monitorlock here?
    (replace (MAILFOLDER CURRENTDISPLAYEDMESSAGE) of FOLDER with NIL)
    (replace (MAILFOLDER CURRENTDISPLAYEDSTREAM) of FOLDER with NIL)
    [if (EQ WINDOW (CAR THESEWINDOWS))
        then
            ; the main window--keep its region
            [replace (MAILFOLDER FOLDERDISPLAYREGION) of FOLDER with (APPEND (WINDOWPROP WINDOW 'REGION)
            (if (CDR THESEWINDOWS)
                then (RPLACA THESEWINDOWS NIL)
                else (replace (MAILFOLDER FOLDERDISPLAYWINDOWS) of FOLDER with NIL))
            else
                ; floating window, just remove
                (RPLACD THESEWINDOWS (DREMOVE WINDOW (CDR THESEWINDOWS)
                (RETURN)])
    )
)

```

(DEFINEQ

## (\LAFITE.UNHIDE.HEADERS

; Edited 10-Dec-87 19:48 by bvm:

```

[LAMBDA (TEXTSTREAM)
  (LET ((FILTERED (TEXTPROP TEXTSTREAM 'FILTERED))
        START W)
    (if (OR (NULL FILTERED)
            (TEXTPROP TEXTSTREAM 'VISIBLE))
        then (PROMPTPRINT "The whole message is already displayed")
        else (TEXTPROP TEXTSTREAM 'READONLY NIL)
              (TEDIT.LOOKS TEXTSTREAM ' (INVISIBLE OFF)
                [ADD1 (SETQ START (CAAR (LAST FILTERED))
                (- (CADAR FILTERED)
                    START))
                (TEDIT.SETSEL TEXTSTREAM 1 0)
                (TEXTPROP TEXTSTREAM 'VISIBLE T)
                (TEXTPROP TEXTSTREAM 'READONLY T)
                (if (SETQ W (LA.WINDOW.FROM.TEXTSTREAM TEXTSTREAM))
                    then
                        ; Remove the * from the title.
                        (WINDOWPROP W 'TITLE (SUBSTRING (WINDOWPROP W 'TITLE)
                                                            2))

```

## (\LAFITE.HIDE.HEADERS

; Edited 10-Dec-87 19:44 by bvm:

```

[LAMBDA (TEXTSTREAM FILTERED)
  [for PAIR in FILTERED do
    (TEDIT.LOOKS TEXTSTREAM ' (INVISIBLE ON)
      (+ (CAR PAIR)
          1)
      (- (CADR PAIR)
          (CAR PAIR)
    (TEDIT.SETSEL TEXTSTREAM 1 0])

```

## (\LAFITE.REHIDE.HEADERS

; Edited 10-Dec-87 19:44 by bvm:

```

[LAMBDA (TEXTSTREAM)
  ;; Called from display window menu to hide the headers again after having them unhidden.
  (LET ((FILTERED (TEXTPROP TEXTSTREAM 'FILTERED))
        START W)
    (if (NULL FILTERED)
        then (PROMPTPRINT "No uninteresting header fields were found")
        elseif (NOT (TEXTPROP TEXTSTREAM 'VISIBLE))
        then (PROMPTPRINT "Uninteresting headers are already hidden")
        else (TEXTPROP TEXTSTREAM 'READONLY NIL)
              (\LAFITE.HIDE.HEADERS TEXTSTREAM FILTERED)
              (TEXTPROP TEXTSTREAM 'VISIBLE NIL)
              (TEXTPROP TEXTSTREAM 'READONLY T)
              (if (SETQ W (LA.WINDOW.FROM.TEXTSTREAM TEXTSTREAM))
                  then
                      ; Add * back to the title.
                      (WINDOWPROP W 'TITLE (CONCAT "*" (WINDOWPROP W 'TITLE))

```

## (\LAFITE.EAT.UNDESIRABLE.FIELD

; Edited 23-Sep-87 13:12 by bvm:

```

[LAMBDA (STREAM IGNORE)
  ;; Parser function called when a field to be filtered is found--skip over the field, and push onto the result a pair giving (start stop) of the whole field.
  (DECLARE (USEDFREE PARSERESULT PARSEBEGIN))
  (LA.SKIP.TO.EOL STREAM)
  (if [AND PARSERESULT (= PARSEBEGIN (CADR (CAR PARSERESULT))
      then
          ; two in a row--combine them
          (CL:SETF (CADR (CAR PARSERESULT))
                    (GETFILEPTR STREAM))
      else (push PARSERESULT (LIST PARSEBEGIN (GETFILEPTR STREAM))

```

```
(LAFITE.SET.DEFAULTLOOKS
(LAMBDA (TEXTSTREAM)
(LAFITE.SET.LOOKS TEXTSTREAM LAFITEDISPLAYFONT))
```

**(\LAFITE.SET.FIXED.LOOKS**

```
[LAMBDA (TEXTSTREAM)
  (LAFITE.SET.LOOKS TEXTSTREAM LAFITEFIXEDWIDTHFONT)]
```

; Edited 22-Sep-87 12:43 by bvm:

**(LAFITE.SET.LOOKS**

```
[LAMBDA (TEXTSTREAM NEWLOOKS PARALOOKS OMITHEADER USERFN)
```

; Edited 3-Nov-89 14:50 by bvm

```
;; Called from Looks (sub)commands of Lafite display window. Change the looks of the current selection (if there is an interesting one) or the
;; whole message to be NEWLOOKS. If NEWLOOKS is T, we use TEdit's menu interface. PARALOOKS is for paragraph formatting. USERFN is
;; arbitrary function called with arg textstream & selection set appropriately. Any of NEWLOOKS, PARALOOKS, USERFN can be NIL. If
;; OMITHEADER is true, the header is left out of the modification if user has not selected a region of text already.
```

```
(RESETLST
  (RESETSAVE NIL (LIST 'TEXTPROP TEXTSTREAM 'READONLY T))
  (TEXTPROP TEXTSTREAM 'READONLY NIL)
  (LET ((SEL (TEDIT.GETSEL TEXTSTREAM))
        START LEN WIDTH FIXEDLOOKS)
    [if (AND (NOT PARALOOKS)
              (FONTP NEWLOOKS)
              (EQ (SETQ WIDTH (CHARWIDTH (CHARCODE "i")
                                           NEWLOOKS))
                  (CHARWIDTH (CHARCODE "w")
                              NEWLOOKS)))
        then
          ; If font is fixed-width, let's make the tab the right width. Might be
          ; nice to restore default tab if it's not fixed-width, but TEdit
          ; apparently doesn't support that.
          (SETQ FIXEDLOOKS (SETQ PARALOOKS `(TABS (, (TIMES WIDTH 8)
                                                     (if (> (SETQ LEN (fetch (SELECTION DCH) of SEL))
                                                         1)
                                                         then
                                                           ; User has already selected something. Assume any selection
                                                           ; greater than a single character is not accidental.
                                                           (if (AND FIXEDLOOKS (NEQ (SETQ FIXEDLOOKS (TEXTPROP TEXTSTREAM 'LAFITEFIXEDLOOKS))
                                                                T))
                                                                then
                                                                  ;; Record the portions we have so marked, so hardcopy can work right--T means everything. If FIXEDLOOKS
                                                                  ;; is false, might want to unset, but that's tedious, unlikely to be worth the hairy code
                                                                  (TEXTPROP TEXTSTREAM 'LAFITEFIXEDLOOKS (CONS (CONS (fetch (SELECTION CH#)
                                                                                                     of SEL)
                                                                                                     LEN)
                                                                                                     FIXEDLOOKS)))
                                                                else (SETQ START (if OMITHEADER
                                                                                                     then
                                                                                                       ; Start after the blank line following the header
                                                                                                       (\LAFITE.HEADER.EOF TEXTSTREAM)
                                                                                                       else 0))
                                                                (SETQ LEN (- (GETEOFPTR TEXTSTREAM)
                                                                (if LAFITEENDOFMESSAGESTR
                                                                    then (NCHARS LAFITEENDOFMESSAGESTR)
                                                                    else 0)
                                                                START))
                                                                (TEDIT.SETSEL TEXTSTREAM (ADD1 START)
                                                                LEN
                                                                'RIGHT)
                                                                (if FIXEDLOOKS
                                                                    then
                                                                      ; The whole thing is fixed now
                                                                      (TEXTPROP TEXTSTREAM 'LAFITEFIXEDLOOKS T)))
                                                                ;; Now do the modification
                                                                (if (EQ NEWLOOKS T)
                                                                    then
                                                                      ; Use menu
                                                                      (\TEDIT.LOOKS (TEXTOBJ TEXTSTREAM))
                                                                    elseif NEWLOOKS
                                                                    then (TEDIT.LOOKS TEXTSTREAM NEWLOOKS))
                                                                (if PARALOOKS
                                                                    then
                                                                      ; Paragraph looks
                                                                      (TEDIT.PARALOOKS TEXTSTREAM PARALOOKS))
                                                                (if USERFN
                                                                    then
                                                                      ; Arbitrary user manipulation.
                                                                      (CL:FUNCALL USERFN TEXTSTREAM))
                                                                ;; Finally, set selection back to where it was.
                                                                (TEDIT.SETSEL TEXTSTREAM SEL)))]])
```

**(LAFITE.SET.TAB.LOOKS**

```
[LAMBDA (TEXTSTREAM FIXEDLOOKS TABWIDTH)
  (LET ([LOOKS `(TABS (, TABWIDTH)
                      (SEL (TEDIT.GETSEL TEXTSTREAM)))
        [if (EQ FIXEDLOOKS T)
            then (TEDIT.PARALOOKS TEXTSTREAM LOOKS 1 (GETEOFPTR TEXTSTREAM))
            else (for PAIR in FIXEDLOOKS do (TEDIT.PARALOOKS TEXTSTREAM LOOKS (CAR PAIR)
                                                                (CDR PAIR)
                                                                ; Finally, restore selection
                                                                (TEDIT.SETSEL TEXTSTREAM SEL))])
```

; Edited 11-Jun-88 17:07 by bvm

**(LAFITE.SET.PARA.SEPARATION**

```
[LAMBDA (TEXTSTREAM)
  (LAFITE.SET.LOOKS TEXTSTREAM NIL ' (PARALEADING 10))
```

; Edited 29-Aug-89 14:53 by bvm

T])

**(LAFITE.SET.LOWER.CASE**

[LAMBDA (TEXTSTREAM)

; Edited 7-Nov-89 13:06 by bvm

;; Called from Looks (sub)commands of Lafite display window. Change the current selection (if there is an interesting one) or the whole message  
 ;; to be lowercase.

```
(LAFITE.SET.LOOKS TEXTSTREAM NIL NIL T (FUNCTION (LAMBDA (TEXTSTREAM)
                                         (LET ((STR (TEDIT.SEL.AS.STRING TEXTSTREAM)))
                                             (TEDIT.DELETE TEXTSTREAM)
                                             (TEDIT.INSERT TEXTSTREAM (L-CASE STR))
                                         )
                                         )
  )
```

**(LAFITE.SUBSTITUTE.VP.EOL**

[LAMBDA (TEXTSTREAM)

; Edited 4-Aug-89 16:55 by bvm

;; Called from Looks (sub)commands of Lafite display window. Replace VP eol (29) with ours.

```
(RESETLST
 (RESESAVE NIL (LIST 'TEXTPROP TEXTSTREAM 'READONLY T))
 (TEXTPROP TEXTSTREAM 'READONLY NIL)
 (LET* ((SEL (TEDIT.GETSEL TEXTSTREAM))
        (LEN (fetch (SELECTION DCH) of SEL))
        (POS)
        (if (<= LEN 1)
            then
                ; If user has already selected something (more than a single
                ; character), assume is not accidental.
                (SETQ POS (CADAR (LAFITE.PARSE.HEADER TEXTSTREAM NIL NIL NIL NIL T)))
                (TEDIT.SETSEL TEXTSTREAM POS (- (GETEOFPTR TEXTSTREAM)
                                                (if LAFITEENDOFMESSAGESTR
                                                    then (NCHARS LAFITEENDOFMESSAGESTR)
                                                    else 0)
                                                POS)))
            (TEDIT.SUBSTITUTE TEXTSTREAM (ALLOCSTRING 1 29)
                                (ALLOCSTRING 1 (CHARCODE EOL))))
        (if POS
            then
                ; Undo the selection
                (TEDIT.SETSEL TEXTSTREAM 1 0))))))
)
```

(RPAQ? \LAFITE.DISPLAY.COMMANDS NIL)

```
(ADDTovar LAFITE.EXTRA.DISPLAY.COMMANDS ("Looks" '\LAFITE.SET.LOOKS.FROM.MENU "Change the appearance of the
selected text, or whole message if nothing selected")
("Hardcopy" '\LAFITE.HARDCOPY.FROM.DISPLAY "Hardcopy this message in
its current appearance")
("Unhide" '\LAFITE.UNHIDE.HEADERS "Display the header fields that are
hidden from view." (SUBITEMS ("Hide" '\LAFITE.REHIDE.HEADERS
"Hide uninteresting fields
from view again"))))
```

```
(ADDTovar LAFITE.LOOKS.SUBCOMMANDS ("VP Line Breaks" '\LAFITE.SUBSTITUTE.VP.EOL "Replace the Viewpoint end of
line character with ours.")
("Lowercase" '\LAFITE.SET.LOWER.CASE "Lowercase the region or whole
message.")
("Spread Paragraphs" '\LAFITE.SET.PARA.SEPARATION "Separate paragraphs by 10
points (useful for Tioga messages).")
("Default" '\LAFITE.SET.DEFAULT.LOOKS "Change selection (or whole text)
back to default font")
("Fixed Width" '\LAFITE.SET.FIXED.LOOKS "Change selection (or whole text)
to fixed-width font"))
```

(DECLARE%: DOEVAL@COMPILE DONTCOPY

(GLOBALVARS \LAFITE.DISPLAY.COMMANDS)

)

;; DELETE

(DEFINEQ

**(LAFITE.DELETE.MESSAGES**

[LAMBDA (FOLDER MESSAGES)

; Edited 31-Aug-88 12:47 by bvm

;; Programmatic entryptpoint to delete a single MSG (# or msg object) from FOLDER. FOLDER must have a browser.

```
(WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of FOLDER)
 (for MSG inside MESSAGES do (DELETEMESAGE (if (type? LAFITEMSG MSG)
                                                then MSG
                                                else (NTHMESSAGE (fetch (MAILFOLDER MESSAGEDESCRIPTORS)
                                                                of FOLDER)
                                                                MSG)
                                                )
  )
  (FOLDER))))
```

**(\LAFITE.DELETE**

[LAMBDA (WINDOW MAILFOLDER ITEM MENU)

; Edited 30-Aug-88 11:42 by bvm



```

(SHADEITEM ITEM MENU LAFITEITEMBUSYSHADE)
(WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of MAILFOLDER)
  (\LAFITE.MAYBE.CLEAR.PROMPT MAILFOLDER)
  (OR (LAB.ASSURE.SELECTIONS MAILFOLDER)
    (for MSGDESCRIPTOR selectedin MAILFOLDER when (NOT (fetch (LAFITEMSG DELETED?) of MSGDESCRIPTOR))
      do
        ; delete all the currently selected messages that aren't already
        ; deleted
        (DELETEMESAGE MSGDESCRIPTOR MAILFOLDER)
    finally (SHADEITEM ITEM MENU WHITESHADE)
      (DISPLAYAFTERDELETE MAILFOLDER WINDOW))))))

```

**(DISPLAYAFTERDELETE**

[LAMBDA (FOLDER WINDOW)

; Edited 29-Aug-88 15:34 by bvm

;;; Maybe select and maybe display the next message after a deletion, according to setting of LAFITEDISPLAYAFTERDELETEFLG --- T means display  
 ;;; next if the deleted one is the one currently displayed and the next message is undeleted and unseen --- ALWAYS means display the next undeleted  
 ;;; message if the deleted one is the one currently displayed; if it's not currently displayed, merely select the next undeleted message --- MULTIPLE  
 ;;; means ALWAYS plus when the selection is multiple, still advance to next undeleted msg.

```

(COND
  (LAFITEDISPLAYAFTERDELETEFLG (LET ((FIRST# (fetch (MAILFOLDER FIRSTSELECTEDMESSAGE) of FOLDER))
    CURRENT LASTMSG# MESSAGES MENU)
    (COND
      [(NEQ FIRST# (fetch (MAILFOLDER LASTSELECTEDMESSAGE) of FOLDER))
        ; More than one message was selected. Only do something if flag says MULTIPLE --
        ; select but don't display next message
        (COND
          ((EQ LAFITEDISPLAYAFTERDELETEFLG 'MULTIPLE)
            (\LAFITE.SELECT.NEXT FOLDER FIRST#])
          ((OR (NOT (SETQ CURRENT (fetch (MAILFOLDER CURRENTDISPLAYEDMESSAGE)
              of FOLDER)))
            (NEQ FIRST# (fetch (LAFITEMSG %) of CURRENT)))
            ; Deleted message is not the one currently displayed
            (SELECTQ LAFITEDISPLAYAFTERDELETEFLG
              ((ALWAYS MULTIPLE)
                ; select but don't display next message
                (\LAFITE.SELECT.NEXT FOLDER FIRST#))
              NIL))
          ([SELECTQ LAFITEDISPLAYAFTERDELETEFLG
            ((ALWAYS MULTIPLE)
              ; Always do it, assuming there's a next message
              (\LAFITE.SELECT.NEXT FOLDER FIRST#))
            (AND (NEQ FIRST# (SETQ LASTMSG# (fetch (MAILFOLDER %OFMESSAGES)
              of FOLDER)))
              [NOT (fetch (LAFITEMSG DELETED?)
                of (NTHMESSAGE (SETQ MESSAGES (fetch (MAILFOLDER
                  MESSAGEDESCRIPTORS
                    )
                  of FOLDER))
                (ADD1 FIRST#])
              (for I from (ADD1 FIRST#) to LASTMSG# bind NEXTMSG
                do
                  ; Next message undeleted, so maybe display it. LAFITEDISPLAYAFTERDELETEFLG = T means
                  ; only do so if it is unexamined. However, messages from us are usually already examined, so
                  ; pretend the message is unexamined if there is some unexamined message immediately after any
                  ; from me
                  (COND
                    ([NOT (fetch (LAFITEMSG SEEN?)
                      of (SETQ NEXTMSG (NTHMESSAGE MESSAGES I])
                      ; An unexamined message, ok
                      (RETURN T))
                    ((NOT (fetch (LAFITEMSG MSGFROMMEP) of NEXTMSG))
                      ; Not from me, but examined, so must not be in the stream of
                      ; new mail
                      (RETURN NIL])
                    (\LAFITE.DISPLAY WINDOW FOLDER (LA.MENU.ITEM (FUNCTION
                      \LAFITE.DISPLAY
                        (SETQ MENU (fetch (MAILFOLDER
                          BROWSERMENU)
                          of FOLDER)))
                      MENU]))

```

**(\LAFITE.SELECT.NEXT**

[LAMBDA (MAILFOLDER AFTER#)

; Edited 23-Aug-88 18:35 by bvm

;;; Select the next undeleted message in MAILFOLDER following AFTER# and return the msg, or NIL if there are no more

```

(for N from (ADD1 AFTER#) to (fetch (MAILFOLDER %OFMESSAGES) of MAILFOLDER)
  bind (MESSAGES _ (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of MAILFOLDER))
  MSG
  unless (fetch (LAFITEMSG DELETED?) of (SETQ MSG (NTHMESSAGE MESSAGES N)))
  do (RETURN (LAB.GO.TO.MESSAGE MAILFOLDER MSG))

```

**(\LAFITE.UNDELETE**

```

[LAMBDA (WINDOW MAILFOLDER ITEM MENU)                                (* bvm%: "28-Mar-84 14:48")
  (RESETLST
    (LA.RESETSHADE ITEM MENU)
    (WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of MAILFOLDER)
      (\LAFITE.MAYBE.CLEAR.PROMPT MAILFOLDER)
      (OR (LAB.ASSURE.SELECTIONS MAILFOLDER)
        (for MSGDESCRIPTOR selectedin MAILFOLDER when (fetch (LAFITEMSG DELETED?) of MSGDESCRIPTOR)
          do (UNDELETEMESAGE MSGDESCRIPTOR MAILFOLDER))))))
)

```

```
;; MOVE
```

```
(DEFINEQ
```

**(\LAFITE.MOVE.MESSAGES**

```

[LAMBDA (SOURCEFOLDER DESTINATIONFOLDER MESSAGES COPYFLG)           ; Edited 13-Sep-88 18:38 by bvm
  ;; Programmatic entry to move (or copy if COPYFLG true) specified MESSAGES from SOURCEFOLDER to DESTINATIONFOLDER. Returns T
  ;; on success.
  (AND MESSAGES (WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of SOURCEFOLDER)
    (\LAFITE.MOVE.MESSAGES.INTERNAL SOURCEFOLDER DESTINATIONFOLDER (\COERCE.TO.MSGSLST
                                                                MESSAGES
                                                                SOURCEFOLDER)
                                                                NIL NIL COPYFLG)))
)

```

**(\COERCE.TO.MSGSLST**

```

[LAMBDA (MSGSLST FOLDER)                                           ; Edited 30-Aug-88 14:11 by bvm
  ;; Accepts a singleton or list of LAFITEMSG objects or numbers relative to FOLDER and returns a list of LAFITEMSG objects
  (if (AND (CL:LISTP MSGSLST)
    (for M in MSGSLST always (type? LAFITEMSG M)))
    then MSGSLST
    else (LET ((MESSAGES (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER)))
      (for M inside MSGSLST collect (if (type? LAFITEMSG M)
        then M
        else (NTHMESSAGE MESSAGES M))
    )
  )

```

**(\LAFITE.MOVETO**

```

[LAMBDA (WINDOW MAILFOLDER ITEM MENU KEY COPYFLG)                 ; Edited 13-Sep-88 18:33 by bvm
  (PROG ((BROWSERPROMPTWINDOW (fetch (MAILFOLDER BROWSERPROMPTWINDOW) of MAILFOLDER))
    LONGFORMP TOFILE OUTPUTFILE DESTINATIONFOLDER MIDDLESELECTED)
    (CLEARW BROWSERPROMPTWINDOW)
    (COND
      ((LAB.ASSURE.SELECTIONS MAILFOLDER)                           ; Nothing to move
        (RETURN)))
    [COND
      ((AND (EQ KEY 'MIDDLE)
        (SETQ DESTINATIONFOLDER (fetch (MAILFOLDER DEFAULTMOVETOFILE) of MAILFOLDER)))
        ; Accelerator: don't use menu. We will still re-obtain the
        ; destination folder below, since the pointer sitting in the folder
        ; may be to a long-closed folder.
        (SETQ MIDDLESELECTED T)
        (SETQ OUTPUTFILE (fetch (MAILFOLDER VERSIONLESSFOLDERNAME) of DESTINATIONFOLDER))
        (T (CL:MULTIPLE-VALUE-SETQ (TOFILE LONGFORMP)
          (\LAFITE.PROMPTFORFOLDER BROWSERPROMPTWINDOW))
          (if (NULL TOFILE)
            then (RETURN NIL))
          (SETQ OUTPUTFILE (LA.LONGFILENAME TOFILE LAFITEMAIL.EXT))
          (COND
            ((STRING-EQUAL OUTPUTFILE (fetch (MAILFOLDER VERSIONLESSFOLDERNAME) of MAILFOLDER))
              (LAB.PROMPTPRINT MAILFOLDER T "This IS " TOFILE ", can't move to there.")
              (RETURN NIL))
            (AND ITEM (SHADEITEM ITEM MENU LAFITEITEMBUSYSHADE))
            (COND
              (LONGFORMP                                             ; if user had to type file longhand, don't confirm now (but there
                                                                    ; may be a confirmation for creation later on)
                )
              ((SELECTQ LAFITEMOVETOCONFIRMFLG
                (NIL                                             ; never confirm
                  T                                             ; don't confirm when middle selected
                    MIDDLESELECTED                             ; confirm ONLY when middle selected
                      (NOT MIDDLESELECTED))
                  NIL))
                [(LAB.MOUSECONFIRM MAILFOLDER "Click LEFT to confirm ~A ~@[of ~D msgs ~]to ~A"
                  (if COPYFLG
                    then "copy"
                    else "move")
                  (AND (< (fetch (MAILFOLDER FIRSTSELECTEDMESSAGE) of MAILFOLDER)
                      (fetch (MAILFOLDER LASTSELECTEDMESSAGE) of MAILFOLDER))

```

```

        (for MSG selectedin MAILFOLDER sum      ; Count how many selected
          1))
      (if DESTINATIONFOLDER
        then (fetch (MAILFOLDER SHORTFOLDERNAME) of DESTINATIONFOLDER)
        else (LA.SHORTFILENAME OUTPUTFILE LAFITEMAIL.EXT]
      (T
        (AND ITEM (SHADEITEM ITEM MENU WHITESHADE))
        (RETURN NIL))
      (\LAFITE.PROCESS ` (, (FUNCTION \LAFITE.MOVETO.PROC)
        ' ,WINDOW
        ' ,MAILFOLDER
        ' ,OUTPUTFILE
        ' ,ITEM
        ' ,MENU NIL ' ,COPYFLG)
      ' LAFITEMOVE])

```

## (\LAFITE.COPYTO

```

[LAMBDA (FOLDER ITEM MENU KEY)                                ; Edited 13-Sep-88 18:37 by bvm
  (LET ((MENU (fetch (MAILFOLDER BROWSERMENU) of FOLDER)))
    (\LAFITE.MOVETO (fetch (MAILFOLDER BROWSERPROMPTWINDOW) of FOLDER)
      FOLDER
      (LA.MENU.ITEM (FUNCTION \LAFITE.MOVETO)
        MENU)
      MENU NIL T))

```

## (\LAFITE.MOVETO.PROC

```

[LAMBDA (WINDOW SOURCEFOLDER DESTINATIONFULLNAME ITEM MENU FROM.AUTO.MENU COPYFLG)
  ; Edited 13-Sep-88 18:24 by bvm

```

;; Move selected messages from SOURCEFOLDER to the folder named by OUTPUTFILE. If FROM.AUTO.MENU is true, it came from the  
 ;; auxiliary moveto menu. Note that MENU is thus not necessarily SOURCEFOLDER's menu.

```

(if (RESETLST
  (LA.RESETSHADE ITEM MENU)
  (OBTAIN.MONITORLOCK (fetch (MAILFOLDER FOLDERLOCK) of SOURCEFOLDER)
    NIL T)
  (LET ((DESTINATIONFOLDER (LAFITE.OBTAIN.FOLDER DESTINATIONFULLNAME 'BOTH SOURCEFOLDER :CONFIRM)))
    (if DESTINATIONFOLDER
      then (\LAFITE.MOVE.MESSAGES.INTERNAL SOURCEFOLDER DESTINATIONFOLDER (LAB.SELECTED.MESSAGES
        SOURCEFOLDER)
        FROM.AUTO.MENU T COPYFLG)))
  then (if COPYFLG
    then (LAB.PROMPTPRINT SOURCEFOLDER "Copy completed.")
    else (DISPLAYAFTERDELETE SOURCEFOLDER WINDOW])

```

## (\LAFITE.MOVE.MESSAGES.INTERNAL

```

[LAMBDA (SOURCEFOLDER DESTINATIONFOLDER MSGLIST FROM.AUTO.MENU INTERACTIVE COPYFLG)
  ; Edited 5-Aug-93 19:50 by bvm

```

;; Move the messages in MSGLIST from SOURCEFOLDER to DESTINATIONFOLDER. Caller must have acquired the lock on SOURCEFOLDER.  
 ;; FROM.AUTO.MENU means the call was from the auxiliary move menu; INTERACTIVE means it was interactive call vs. programmatic.

```

(PROG (OUTPUTSTREAM MSGDESCRIPTORS OLDMOVETO)
  (COND
    ((NOT (OBTAIN.MONITORLOCK (fetch (MAILFOLDER FOLDERLOCK) of DESTINATIONFOLDER)
      T T))
      (LAB.PROMPTPRINT SOURCEFOLDER T "Waiting for " (fetch (MAILFOLDER SHORTFOLDERNAME) of
        DESTINATIONFOLDER)
        " to become available...")
      (OBTAIN.MONITORLOCK (fetch (MAILFOLDER FOLDERLOCK) of DESTINATIONFOLDER)
        NIL T)
      (LAB.PROMPTPRINT SOURCEFOLDER T)))
    (COND
      ([NOT (AND (\LAFITE.OPEN.FOLDER SOURCEFOLDER 'INPUT NIL)
        (SETQ OUTPUTSTREAM (\LAFITE.OPEN.FOLDER DESTINATIONFOLDER 'BOTH :OK SOURCEFOLDER)
          ; Failed to open source or dest
        (RETURN NIL)))]
        [COND
          ((NEQ (SETQ OLDMOVETO (fetch (MAILFOLDER DEFAULTMOVETOFILE) of SOURCEFOLDER))
            DESTINATIONFOLDER)
            (LET ((WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of SOURCEFOLDER)))
              (replace (MAILFOLDER DEFAULTMOVETOFILE) of SOURCEFOLDER with DESTINATIONFOLDER)
              (WINDOWPROP WINDOW 'TITLE (LAB.TITLE.STRING SOURCEFOLDER))
              (if [AND OLDMOVETO (NOT FROM.AUTO.MENU)
                (OR LAFITE.AUTO.MOVE.MENU (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.NAMES]
                then (\LAFITE.ADD.TO.MOVE.MENU SOURCEFOLDER DESTINATIONFOLDER OLDMOVETO]
              (SETQ MSGDESCRIPTORS (for OLDMSG in MSGLIST bind NEWMSG (INSTREAM _ (\LAFITE.OPEN.FOLDER SOURCEFOLDER
                'INPUT))
                collect (MAYBEVERIFYSMSG OLDMSG SOURCEFOLDER)
                (SETFILEPTR OUTPUTSTREAM -1)
                (SETQ NEWMSG (NCREATE 'LAFITEMSG OLDMSG))
                ; New descriptor looks a lot like old
                (replace (LAFITEMSG BEGIN) of NEWMSG with (GETFILEPTR OUTPUTSTREAM))
                (replace (LAFITEMSG MESSAGELENGTHCHANGED?) of NEWMSG with NIL)
                (replace (LAFITEMSG MARKSCHANGEDINFILE?) of NEWMSG with NIL)

```

```

(replace (LAFITEMSG MARKSCHANGEDINTOC?) of NEWMSG with NIL)
(replace (LAFITEMSG DELETED?) of NEWMSG with NIL)
(replace (LAFITEMSG SELECTED?) of NEWMSG with NIL)
(LA.PRINTHEADER OUTPUTSTREAM (- (fetch (LAFITEMSG MESSAGELENGTH)
                                     of OLDMSG)
                                (fetch (LAFITEMSG STAMPLENGTH)
                                     of OLDMSG)))
NEWMSG)
(PROGN                                     ; Now the 3 flag bytes
 (BOUT OUTPUTSTREAM UNDELETEDFLAG)
 (BOUT OUTPUTSTREAM (COND
                     ((fetch (LAFITEMSG SEEN?) of OLDMSG)
                      SEENFLAG)
                     (T UNSEENFLAG)))
 (BOUT OUTPUTSTREAM (fetch (LAFITEMSG MARKCHAR) of OLDMSG))
 (BOUT OUTPUTSTREAM (CHARCODE CR)))
 (COPYBYTES INSTREAM OUTPUTSTREAM (fetch (LAFITEMSG START) of OLDMSG)
            (fetch (LAFITEMSG END) of OLDMSG))
 (if (NOT COPYFLG)
     then (MARKMESSAGE OLDMSG SOURCEFOLDER MOVETOMARK)
          ; delete it
          (DELETEMESAGE OLDMSG SOURCEFOLDER))
NEWMSG))
[COND
 (AND (fetch (MAILFOLDER BROWSERWINDOW) of DESTINATIONFOLDER)
      (fetch (MAILFOLDER BROWSERREADY) of DESTINATIONFOLDER))
      ; now print them in the other window, if up
      (LAB.APPENDMESSAGES DESTINATIONFOLDER MSGDESCRIPTORS))
 (T                                     ; still have to update eof
  (replace (MAILFOLDER FOLDEREOPTR) of DESTINATIONFOLDER with (GETEOFPTR OUTPUTSTREAM]
 (RETURN T])
)

```

;; Aux move

(DEFINEQ

#### (\LAFITE.ENABLE.MOVE.MENU

[LAMBDA (FOLDER) ; Edited 31-Aug-88 12:39 by bvm

;; Bring up a menu of folders attached to FOLDER's browser for accelerated MoveTo

```

(LET* ((WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of FOLDER))
       (ITEMS (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.NAMES))
       (OLDDEFAULT (fetch (MAILFOLDER DEFAULTMOVETOFILE) of FOLDER)))
 (LAB.PROMPTPRINT FOLDER T "Specify which folders to include in the accelerated menu.")
 (if OLDDEFAULT
     then (CL:PUSHNEW (fetch (MAILFOLDER SHORTFOLDERNAME) of OLDDEFAULT)
                      ITEMS :TEST 'STRING-EQUAL))
 (if (SETQ ITEMS (LAFITE.SELECT.FOLDERS ITEMS))
     then                                     ; Didn't abort
      (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.NAMES ITEMS)
      (\LAFITE.UPDATE.MOVE.MENU FOLDER T))
 (LAB.PROMPTPRINT FOLDER T])

```

#### (\LAFITE.ADD.TO.MOVE.MENU

[LAMBDA (FOLDER NEWFOLDER OLDFOLDER) ; Edited 31-Aug-88 12:43 by bvm

;; Add NEWFOLDER to FOLDER's auto move menu, creating it if necessary, in which case also include OLDFOLDER

```

(PROG* ((NEWNAME (fetch (MAILFOLDER SHORTFOLDERNAME) of NEWFOLDER))
        (WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of FOLDER))
        (OLDITEMS (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.NAMES))
        (ITEMS OLDITEMS))
 (COND
  [(NULL ITEMS)
   (SETQ ITEMS (LIST NEWNAME))
   (if OLDFOLDER
       then (push ITEMS (fetch (MAILFOLDER SHORTFOLDERNAME) of OLDFOLDER)
                  (CL:MEMBER NEWNAME ITEMS :TEST 'STRING-EQUAL) ; Nothing new to do
              (RETURN))
       (T (push ITEMS NEWNAME))
   (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.NAMES ITEMS)
   (\LAFITE.UPDATE.MOVE.MENU FOLDER (NULL OLDITEMS))

```

#### (\LAFITE.UPDATE.MOVE.MENU

[LAMBDA (FOLDER FORCE) ; Edited 23-Aug-89 12:21 by bvm

;; Called when someone has changed the set of folder names in FOLDER's auto move menu. This function creates a new menu. If the menu is  
 ;; not currently open, we don't open one unless FORCE is true.

```

(PROG* ((WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of FOLDER))
        (MENUW (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.MENU))
        (HOW POSITION TITLE)
        (if (NOT (OPENWP WINDOW))
            then                                     ; Maybe the browser is shrunk. The system doesn't know how to
                                                    ; attach to shrunken windows, so just punt it

```

```

      (RETURN)
    elseif MENUW
    then
      (DETACHWINDOW MENUW WINDOW)
      (CLOSEW MENUW)
      ; Remove the old window and make a new
    elseif (NULL FORCE)
    then (RETURN)
  [SETQ POSITION (SELECTQ (SETQ HOW LAFITE.AUTO.MOVE.MENU)
    ((LEFT RIGHT)
     'TOP)
    ((BOTTOM TOP)
     'LEFT)
    (PROGN (SETQ HOW 'RIGHT)
            'TOP)]
  (CL:MULTIPLE-VALUE-BIND (NCOLUMNS ITEMS)
    (\LAFITE.ARRANGE.MENU (APPEND (SORT (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.NAMES)
      (FUNCTION UALPHORDER))
      (AND LAFITE.EXTRA.MOVE.ITEMS (CONS '("" 'NIL ""))
        LAFITE.EXTRA.MOVE.ITEMS)))
    LAFITE.FOLDER.MENU.FONT
    (- (LET* ((REG (WINDOWREGION WINDOW))
              (BROWSERHEIGHT (fetch (REGION HEIGHT) of REG)))
        (if (EQ POSITION 'TOP)
            then
              ; Don't make the menu much taller than the window or below
              ; bottom of screen
              (MIN (+ BROWSERHEIGHT (IQUOTIENT BROWSERHEIGHT 2))
                    (fetch (REGION TOP) of REG))
            else
              ; Don't make it taller than the screen
              (- SCREENHEIGHT BROWSERHEIGHT)))
      (FONTPROP WINDOWTITLEFONT 'HEIGHT))
    (SETQ TITLE "Move To:"))
  (SETQ MENUW
    (MENUWINDOW (create MENU
      ITEMS _ ITEMS
      MENUCOLUMNS _ NCOLUMNS
      CENTERFLG _ T
      TITLE _ TITLE
      WHENHELDFN _ [FUNCTION (LAMBDA (ITEM)
        (PROMPTPRINT (if (LISTP ITEM)
          then (CADDR ITEM)
          else "Move the selected message(s) to
            this folder"]
          WHENSELECTEDFN _ (FUNCTION \LAFITE.HANDLE.AUTO.MOVE)
          MENUFONT _ LAFITE.FOLDER.MENU.FONT
          MENUTITLEFONT _ WINDOWTITLEFONT))))
    (ATTACHWINDOW MENUW WINDOW HOW POSITION 'LOCALCLOSE)
    (WINDOWADDPROP MENUW 'CLOSEFN [FUNCTION (LAMBDA (W)
      ;; Remove pointer to me. Note that this fn must come first, before detachwindow
      (AND (SETQ W (MAINWINDOW W))
        (WINDOWPROP W 'LAFITE.AUTO.MOVE.MENU NIL])
      T)
    (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.MENU MENUW])

```

## (\LAFITE.RESTORE.MOVE.MENU

```

[LAMBDA (FOLDER)
  (LET* [(WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of FOLDER))
    (ITEMS (WINDOWPROP WINDOW 'LAFITE.AUTO.MOVE.NAMES)]
    (if ITEMS
      then
        (\LAFITE.UPDATE.MOVE.MENU FOLDER T)
        ; Yes, there was a menu, so bring it up
      else
        (\LAFITE.ENABLE.MOVE.MENU FOLDER])
        ; Start from scratch
    )
  )

```

## (\LAFITE.HANDLE.AUTO.MOVE

```

[LAMBDA (ITEM MENU KEY)
  ;; Handle the selection of an item from Lafite's auto moveto menu. Just do the specified move
  (LET ((MENUW (WFROMMENU MENU))
    WINDOW FOLDER)
    (AND MENUW (SETQ WINDOW (MAINWINDOW MENUW))
      (SETQ FOLDER (WINDOWPROP WINDOW 'MAILFOLDER))
      (fetch (MAILFOLDER BROWSERREADY) of FOLDER)
      (if (LISTP ITEM)
        then
          ; Handle other commands
          (CL:FUNCALL (EXTRACTMENUCOMMAND ITEM)
            WINDOW FOLDER ITEM MENU KEY)
        else (\LAFITE.PROCESS ` (, (FUNCTION \LAFITE.MOVETO.PROC)
          ', WINDOW
          ', FOLDER
          ', (LA.LONGFILENAME ITEM LAFITEMAIL.EXT)
          ', ITEM
          ', MENU T)
          'LAFITEMOVE]))
  )

```

```

)

(ADDTOVAR LAFITEEXTRAMENUITEMS ("Enable MoveTo Menu" '\LAFITE.ENABLE.MOVE.MENU "Attach a menu of folders for
accelerated MoveTo (or modify existing one)" (SUBITEMS
("Restore MoveTo Menu"
'\LAFITE.RESTORE.MOVE.MENU
"Just reopen the attached
MoveTo menu if it
existed.")))
("Copy To" '\LAFITE.COPYTO "Like MoveTo, but don't delete the message(s)."))

(ADDTOVAR LAFITE.EXTRA.MOVE.ITEMS ("---Display---" '\LAFITE.DISPLAY "Display the next message")
("---Delete---" '\LAFITE.DELETE "Delete the selected message(s)"))

(RPAQ? LAFITE.AUTO.MOVE.MENU )

;; UPDATE

(DEFINEQ

(\LAFITE.UPDATE
[LAMBDA (WINDOW FOLDER ITEM MENU BUTTONS)
(LET
((HOWINDEX (LAB.UPDATE.NEEDED? FOLDER))
HOW? HOWSTRING CLOSEFLG CONFIRMFLG)
(\LAFITE.MAYBE.CLEAR.PROMPT FOLDER)
[if (AND (EQ BUTTONS 'MIDDLE)
LAFITE.MIDDLE.UPDATE)
then
; Accelerator: do what this flag says, asking only for confirmation
; first
(for OP inside LAFITE.MIDDLE.UPDATE
do (CASE OP
((:CLOSE :SHRINK) (SETQ CLOSEFLG OP))
((:UPDATE :EXPUNGE)
(SETQ HOWSTRING (if (AND (EQ OP :EXPUNGE)
(BITTEST HOWINDEX \EXPUNGE.MENU.BIT))
then
; Expunge is needed and requested
(SETQ HOW? (FUNCTION \LAFITE.EXPUNGE.PROC))
"Expunge"
elseif (BITTEST HOWINDEX \SORT.MENU.BIT)
then
; Have to do with expunge
(SETQ HOW? (FUNCTION \LAFITE.EXPUNGE.PROC))
"Write sorted"
elseif (BITTEST HOWINDEX \EXPUNGE&SORT.MENU.BIT)
then
; Have to do with expunge
(SETQ HOW? (FUNCTION \LAFITE.EXPUNGE.PROC))
"Expunge (write sorted)"
elseif (BITTEST HOWINDEX \UPDATE.MENU.BIT)
then
(SETQ HOW? (FUNCTION \LAFITE.UPDATE.PROC))
"Write out changes"
elseif (BITTEST HOWINDEX \TOC.MENU.BIT)
then
(SETQ HOW? (FUNCTION \LAFITE.UPDATE.PROC))
"Update table of contents"))
(if (BITTEST HOWINDEX \HARDCOPY.MENU.BIT)
then
; Also might want to hardcopy
(SETQ HOWSTRING (if (NULL HOW?)
then (SETQ HOW? (FUNCTION \LAFITE.HARDCOPYONLY.PROC))
"Hardcopy"
else (CONCAT "Hardcopy, " HOWSTRING)))
elseif (NULL HOW?)
then
; Pretend no update is needed, even if left-update would have
; said Expunge
(SETQ HOWINDEX 0)))
(:CONFIRM (SETQ CONFIRMFLG T)))]
(if (AND (NULL CLOSEFLG)
(EQ 0 HOWINDEX))
then
; We weren't asked to close it, and nothing changed.
(LAB.PROMPTPRINT FOLDER T "No changes since the last Update")
elseif
[SETQ HOW?
(if (OR HOWSTRING CLOSEFLG)
then (if (AND (NULL HOWSTRING)
(EQ CLOSEFLG :SHRINK))
then
; Accelerator says Shrink, and there is nothing else to do, so just
; shrink
(FUNCTION \LAFITE.FINISH.UPDATE)
elseif [OR (NULL CONFIRMFLG)
(LAB.MOUSECONFIRM FOLDER
(CONCATLIST (CONS "Click LEFT to confirm "
(LET [(CF (AND CLOSEFLG (LIST (L-CASE CLOSEFLG T)
(if HOWSTRING
then (LIST* HOWSTRING (AND CF (CONS " and " CF)))
else CF]
then (OR HOW? (FUNCTION \LAFITE.FINISH.UPDATE)))
else (MENU (LAB.CHOOSE.UPDATE.MENU HOWINDEX)
then (\LAFITE.PROCESS (LIST HOW? (KWOTE WINDOW)

```

```

(KWOTE FOLDER)
CLOSEFLG
(KWOTE ITEM)
(KWOTE MENU))
'LAFITEUPDATE])

```

## (\LAFITE.EXPUNGE.PROC

[LAMBDA (WINDOW MAILFOLDER CLOSEFLG ITEM MENU)

; Edited 1-May-89 12:53 by bvm

```

(RESETLST
  (\LAFITE.START.UPDATE MAILFOLDER ITEM MENU)
  (\LAFITE.CLOSE.DISPLAYWINDOWS MAILFOLDER)
  (CLEARW WINDOW)
  (\LAFITE.COMPACT.FOLDER MAILFOLDER)
  (\LAFITE.CLOSE.FOLDER MAILFOLDER T)
  (COND
    (CLOSEFLG (replace (MAILFOLDER BROWSERUPDATEFROMHERE) of MAILFOLDER with 0))
    (T (LAB.DISPLAYFOLDER MAILFOLDER))))

```

```

; Do the following outside RESETLST so that Update gets
; unshaded

```

(\LAFITE.FINISH.UPDATE WINDOW MAILFOLDER CLOSEFLG])

## (\LAFITE.UPDATE.PROC

[LAMBDA (WINDOW MAILFOLDER CLOSEFLG ITEM MENU)

; Edited 14-Oct-87 20:00 by bvm:

```

(RESETLST
  (\LAFITE.START.UPDATE MAILFOLDER ITEM MENU)
  (COND
    ((OR (COND
      ((fetch (MAILFOLDER FOLDERNEEDSUPDATE) of MAILFOLDER)
        (\LAFITE.UPDATE.FOLDER MAILFOLDER)
        T))
      (NEQ (fetch (MAILFOLDER %#OFMESSAGES) of MAILFOLDER)
        (fetch (MAILFOLDER TOCLASTMESSAGE#) of MAILFOLDER))))
      (\LAFITE.UPDATE.CONTENTS MAILFOLDER (fetch (MAILFOLDER %#OFMESSAGES) of MAILFOLDER)))
      (T (LAB.PROMPTPRINT MAILFOLDER T "No changes since last update"))))
  (\LAFITE.CLOSE.FOLDER MAILFOLDER T))

```

```

; Do the following outside RESETLST so that Update gets
; unshaded

```

(\LAFITE.FINISH.UPDATE WINDOW MAILFOLDER CLOSEFLG])

## (\LAFITE.HARDCOPYONLY.PROC

[LAMBDA (WINDOW MAILFOLDER CLOSEFLG ITEM MENU)

; Edited 29-Aug-88 17:49 by bvm

```

;; Called by Update or Close to just do pending hardcopy, nothing else
(RESETLST
  (LAB.START.COMMAND MAILFOLDER (FUNCTION \LAFITE.UPDATE)
    ITEM MENU)
  (\LAFITE.DO.PENDING.HARDCOPY MAILFOLDER))
(\LAFITE.FINISH.UPDATE WINDOW MAILFOLDER CLOSEFLG])

```

## (\LAB.CHOOSE.UPDATE.MENU

[LAMBDA (FOLDER CLOSEFLG)

; Edited 25-Apr-89 15:10 by bvm

```

;; Returns a menu for prompting the user about what to do with FOLDER when Update is requested, or if CLOSEFLG is true, if Close/Shrink is
;; requested. Returns NIL if there is no interesting choice.

```

```

(LET [(INDEX (OR (FIXP FOLDER)
  (\LAB.UPDATE.NEEDED? FOLDER)
  (if (NEQ INDEX 0)
    then (CASE CLOSEFLG
      (:CLOSE (SETQ INDEX (LOGOR INDEX \CLOSE.MENU.BIT)))
      (:SHRINK (SETQ INDEX (LOGOR INDEX \SHRINK.MENU.BIT))))
      (OR (GETHASH INDEX LAFITE.UPDATE.MENU.HASH)
        (\LAB.CREATE.UPDATE.MENU INDEX]))

```

## (\LAB.CREATE.UPDATE.MENU

[LAMBDA (INDEX)

; Edited 25-Apr-89 15:08 by bvm

```

;; Create a menu to ask about updating. There is a bit in INDEX for each possible thing you might want to do to update this folder -- Update,
;; Expunge, Update TOC, Hardcopy, Expunge&Sort. Not all bit combinations are possible. In practice, only a small number of combinations
;; actually occur, so we remember menus in a hash table.

```

```

(LET* ((LASTITEM NIL)
  (ITEMS (for ITEM in LAFITEUPDATEMENUITEMS as (BIT _ 1) by (LLSH BIT 1) when (BITTEST INDEX BIT)
    collect (if (NOT (BITTEST INDEX (LOGOR \CLOSE.MENU.BIT \SHRINK.MENU.BIT)))
      then (SETQ LASTITEM ITEM)
      ITEM))

```

```

MENU)
[if (STRPOS "Only" (CAR LASTITEM)
  -4 NIL T NIL UPPERCASEARRAY)

```

then

; Sounds funny if last item says "Only"

```

(RPLACA (FMEMB LASTITEM ITEMS)
  (CONS (SUBSTRING (CAR LASTITEM)
    1 -6)
    (CDR LASTITEM)

```

```

(SETQ MENU (\LAFITE.CREATE.MENU ITEMS (if (BITTEST INDEX \CLOSE.MENU.BIT)
  then "Close Options"

```

```

                elseif (BITTEST INDEX \SHRINK.MENU.BIT)
                then "Shrink Options"
                else "Update Options"))
(PUTHASH INDEX MENU LAFITE.UPDATE.MENU.HASH)
MENU])

```

**(LAB.UPDATE.NEEDED?**

[LAMBDA (FOLDER) ; Edited 25-Apr-89 15:08 by bvm

;; Returns an integer whose bits indicate the type of updating needed by FOLDER; zero if it needs none.

```

(LOGOR (COND
  ((fetch (MAILFOLDER HARDCOPYSTREAM) of FOLDER)
    \HARDCOPY.MENU.BIT)
  (T 0))
  (if (NOT (fetch (MAILFOLDER FOLDEROUTOFORDER) of FOLDER))
    then (LOGOR (if (fetch (MAILFOLDER FOLDERNEEDSUPDATE) of FOLDER)
      then \UPDATE.MENU.BIT
      elseif (NEQ (fetch (MAILFOLDER %OFMESSAGES) of FOLDER)
        (fetch (MAILFOLDER TOCLASTMESSAGE#) of FOLDER))
      then
        \TOC.MENU.BIT
      else 0)
      (if (fetch (MAILFOLDER FOLDERNEEDSEXPUNGE) of FOLDER)
        then \EXPUNGE.MENU.BIT
        else 0))
    elseif (fetch (MAILFOLDER FOLDERNEEDSEXPUNGE) of FOLDER)
    then \EXPUNGE&SORT.MENU.BIT
    else \SORT.MENU.BIT])

```

**(\LAFITE.START.UPDATE**

[LAMBDA (MAILFOLDER ITEM MENU) ; Edited 18-Jul-88 11:56 by bvm

;; Called under a RESETLST to start an UPDATE or EXPUNGE

```

(LAB.START.COMMAND MAILFOLDER (FUNCTION \LAFITE.UPDATE)
  ITEM MENU)
(RESETSAVE NIL (LIST (FUNCTION (LAMBDA (MAILFOLDER)
  (replace (MAILFOLDER FOLDERBEINGUPDATED) of MAILFOLDER with NIL]
  MAILFOLDER))
  (replace (MAILFOLDER FOLDERBEINGUPDATED) of MAILFOLDER with T) ; Mark folder being updated for benefit of LOGOUT check
  (\LAFITE.CLOSE.OTHER.FOLDERS MAILFOLDER) ; Close all other folders, so MoveTo's are up to date
  (\LAFITE.DO.PENDING.HARDCOPY MAILFOLDER MENU]))

```

**(LAB.START.COMMAND**

[LAMBDA (MAILFOLDER CMD ITEM MENU) ; Edited 18-Jul-88 11:56 by bvm

;; Shades MAILFOLDER's command implemented by CMD, or ITEM of MENU if supplied and obtains the folder lock. Opens browser window if it is shrunk. Must be called under RESETLST surrounding command execution.

```

(LET ((WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of MAILFOLDER)))
  (if (AND WINDOW (NOT (OPENWP WINDOW)))
    then (EXPANDW WINDOW)))
(LA.RESETSHADE [OR ITEM (LA.MENU.ITEM CMD (SETQ MENU (fetch (MAILFOLDER BROWSERMENU) of MAILFOLDER)
  MENU)
(OBTAIN.MONITORLOCK (fetch (MAILFOLDER FOLDERLOCK) of MAILFOLDER)
  NIL T)
(\LAFITE.MAYBE.CLEAR.PROMPT MAILFOLDER)])

```

**(\LAFITE.FINISH.UPDATE**

[LAMBDA (WINDOW MAILFOLDER CLOSEFLG) ; Edited 7-Jun-88 14:28 by bvm

;;; Takes care of closing/shrinking WINDOW after an update or expunge.

```

(WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of MAILFOLDER)
  (CASE CLOSEFLG
    ((:CLOSE :EXIT) (WITH.MONITOR \LAFITE.BROWSELOCK
      (\LAFITE.CLOSE.FOLDER MAILFOLDER T)
      (SETQ WINDOW (LAB.FLUSHWINDOW WINDOW MAILFOLDER))
      (CLOSEW WINDOW)
      (COND
        ((AND (NEQ CLOSEFLG :EXIT)
          (OR (NOT (fetch (MAILFOLDER FOLDEREOPTR) of MAILFOLDER))
            (= (fetch (MAILFOLDER FOLDEREOPTR) of MAILFOLDER)
              0))
          (EQ (GETFILEINFO (fetch (MAILFOLDER FULLFOLDERNAME) of MAILFOLDER)
            'LENGTH)
              0))
          ;; Folder is empty, and we are explicitly closing it (as opposed to indirectly via the Quit command), so
          ;; delete underlying file, etc. FOLDEREOPTR should always be right, but be paranoid and
          ;; double-check with the file itself before deleting
          (DELETEMAILFOLDER MAILFOLDER))))))
    (:SHRINK
      (\LAFITE.CLOSE.DISPLAYWINDOWS MAILFOLDER)
      (\LAFITE.CLOSE.FOLDER MAILFOLDER T)

```



```
(WINDOWADDPROP WINDOW 'EXPANDFN (FUNCTION LAB.EXPANDFN))
(WINDOWDELPROP WINDOW 'SHRINKFN (FUNCTION LAB.SHRINKFN))
(SHRINKW WINDOW)))
```

```
(COND
  (\LAFITEPROFILECHANGED (\LAFITE.WRITE.PROFILE])
```

**(\LAFITE.CLOSE.OTHER.FOLDERS**

```
[LAMBDA (THISFOLDER)                                     (* bvm%: "31-Jul-84 15:17")
  ;; Closes or flushes output of all Lafite folders except THISFOLDER. If a folder does not have an open browser, the file is closed; else output is
  ;; flushed
  (WITH.MONITOR \LAFITE.MAINLOCK
    [for FOLDER in \ACTIVELAFITEFOLDERS when (AND (NEQ FOLDER THISFOLDER)
                                                    (fetch (MAILFOLDER FOLDERSTREAM) of FOLDER))
      do (RESETLST
          [COND
            ((OBTAIN.MONITORLOCK (fetch (MAILFOLDER FOLDERLOCK) of FOLDER)
              T T)
              (\LAFITE.CLOSE.FOLDER FOLDER (NULL (OPENWP (fetch (MAILFOLDER BROWSERWINDOW) of FOLDER))))))
          ]
      )
    ]
  )
)
```

```
(DEFINEQ
```

**(LAB.FLUSHWINDOW**

```
[LAMBDA (WINDOW MAILFOLDER)                               ; Edited 18-Jul-88 11:37 by bvm
  (\LAFITE.CLOSE.DISPLAYWINDOWS MAILFOLDER)
  (WINDOWDELPROP WINDOW 'CLOSEFN (FUNCTION LAB.CLOSEFN))
  [replace (MAILFOLDER BROWSERREADY) of MAILFOLDER
    with (replace (MAILFOLDER MESSAGEDESCRIPTORS) of MAILFOLDER
      with (replace (MAILFOLDER DEFAULTMOVETOFILE) of MAILFOLDER
        with (replace (MAILFOLDER BROWSERMENUWINDOW) of MAILFOLDER
          with (replace (MAILFOLDER BROWSERWINDOW) of MAILFOLDER
            with (replace (MAILFOLDER BROWSERMENU) of MAILFOLDER
              with (replace (MAILFOLDER BROWSERPROMPTWINDOW) of MAILFOLDER
                with NIL]
          )
        )
      )
    ]
  (WINDOWPROP WINDOW 'MAILFOLDER NIL)
  (SETQ \ACTIVELAFITEFOLDERS (DREMOVE MAILFOLDER \ACTIVELAFITEFOLDERS))
  (OR (OPENWP WINDOW)
    (OPENWP (WINDOWPROP WINDOW 'ICONWINDOW]))
```

**(LAB.APPENDMESSAGES**

```
[LAMBDA (FOLDER NEWMESSAGEDESCRIPTORS)                   ; Edited 28-Apr-89 15:47 by bvm
  ;; Append list of message descriptors to folder, adjusting display, etc as needed.
  (PROG ((LASTMSG# (fetch (MAILFOLDER %OFMESSAGES) of FOLDER))
        FIRSTMSG#)
    (SETQ FIRSTMSG# (ADD1 LASTMSG#))
    (replace (MAILFOLDER FOLDEREOPTR) of FOLDER with (GETEOPTR (fetch (MAILFOLDER FOLDERSTREAM)
                                                                    of FOLDER)))
    (for MSGDESCRIPTOR in NEWMESSAGEDESCRIPTORS do (replace (LAFITEMSG %#) of MSGDESCRIPTOR
                                                              with (add LASTMSG# 1))
      (LAFITE.PARSE.MSG.FOR.TOC MSGDESCRIPTOR FOLDER))
    (replace (MAILFOLDER %OFMESSAGES) of FOLDER with LASTMSG#)
    (replace (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER with (\LAFITE.ADDMESSAGES.TO.ARRAY
                                                              (fetch (MAILFOLDER MESSAGEDESCRIPTORS)
                                                                of FOLDER)
                                                              NEWMESSAGEDESCRIPTORS FIRSTMSG# LASTMSG#))
    (LET ((EXTENT (fetch (MAILFOLDER BROWSEREXTENT) of FOLDER))
          (HEIGHT (TIMES LASTMSG# (fetch (MAILFOLDER BROWSERFONTHEIGHT) of FOLDER)))
          WINDOW)
      (replace (REGION HEIGHT) of EXTENT with HEIGHT)
      (replace (REGION BOTTOM) of EXTENT with (- (fetch (MAILFOLDER BROWSERORIGIN) of FOLDER)
                                                  HEIGHT))
      (WINDOWPROP (SETQ WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of FOLDER))
        'EXTENT EXTENT)
      (COND
        ((OPENWP WINDOW)                                     ; If window is visible, update it now
          (LAB.DISPLAYLINES FOLDER FIRSTMSG#))
        ((NULL (fetch (MAILFOLDER BROWSERUPDATEFROMHERE) of FOLDER))
          ; Mark browser for display update after being unshrunk
          (replace (MAILFOLDER BROWSERUPDATEFROMHERE) of FOLDER with FIRSTMSG#))
      )
    )
)
```

**(\LAFITE.COMPACT.FOLDER**

```
[LAMBDA (FOLDER)                                           ; Edited 10-May-89 12:42 by bvm
```

```
;;; Expunge deleted messages from MAILFOLDER. We copy undeleted messages after the first deleted one into a scratch file and copy the scratch file
;;; back into the main file. Returns the msg # of the last message before the compacted section. This function must also be used if the folder is out of
;;; order.
```

```
(LET* ((MESSAGES (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER))
      (LASTMSG# (fetch (MAILFOLDER %OFMESSAGES) of FOLDER))
      (FIRSTCHANGED# (fetch (MAILFOLDER FIRSTCHANGEDMESSAGE) of FOLDER))
```

```

(LASTGOODMSG# (SUB1 FIRSTCHANGED#))
(LASTLENGTH 0)
(LASTBEGIN 0)
FOLDERSTREAM MSG TOCSTREAM)
(if (> FIRSTCHANGED# 1)
    then
        ; Get this loop initialized
        (SETQ MSG (NTHMESSAGE MESSAGES LASTGOODMSG#))
        (SETQ LASTBEGIN (fetch (LAFITEMSG BEGIN) of MSG))
        (SETQ LASTLENGTH (fetch (LAFITEMSG MESSAGELENGTH) of MSG))
;; first see if there are any messages to delete or messages out of order and while doing so collect information for rapidly compacting the
;; file just in case we have to. We check for out of order by maintaining previous pointer and length so as to avoid boxing most of the time.
(for MSG# from (MAX 1 FIRSTCHANGED#) to LASTMSG#
    until (OR (fetch (LAFITEMSG DELETED?) of (SETQ MSG (NTHMESSAGE MESSAGES MSG#)))
        (NOT (= (- (fetch (LAFITEMSG BEGIN) of MSG)
            LASTBEGIN)
            LASTLENGTH)))
    do [COND
        ((fetch (LAFITEMSG MARKSCHANGEDINFILE?) of MSG)
            (WRITEFOLDERMARKBYTES MSG FOLDER (OR FOLDERSTREAM (SETQ FOLDERSTREAM (\LAFITE.OPEN.FOLDER
                FOLDER
                'BOTH :ABORT])
            (SETQ LASTGOODMSG# MSG#)
            (SETQ LASTBEGIN (fetch (LAFITEMSG BEGIN) of MSG))
            (SETQ LASTLENGTH (fetch (LAFITEMSG MESSAGELENGTH) of MSG)))
[COND
    ((NEQ LASTGOODMSG# LASTMSG#)
        (SETQ TOCSTREAM (\LAFITE.COMPACT.FOLDER1 FOLDER (OR FOLDERSTREAM (\LAFITE.OPEN.FOLDER FOLDER
            'BOTH :ABORT])
            LASTGOODMSG#]
(replace (MAILFOLDER FOLDERNEEDSEXPUNGE) of FOLDER with NIL)
(replace (MAILFOLDER FOLDEROUTOFORDER) of FOLDER with NIL)
(replace (MAILFOLDER FIRSTCHANGEDMESSAGE) of FOLDER with (ADD1 (fetch (MAILFOLDER %#OFMESSAGES)
    of FOLDER)))
(\LAFITE.UPDATE.CONTENTS FOLDER LASTGOODMSG# TOCSTREAM])

```

## (\LAFITE.COMPACT.FOLDER1

[LAMBDA (FOLDER FOLDERSTREAM LASTGOODMSG#)

; Edited 13-Jul-92 16:01 by bvm

;;; LASTGOODMSG# is the number of the last good message before the region to be compacted. FOLDERSTREAM is open for io.

```

(LET (SCRATCHFILE STATE ORIGEOF CONDITION TOCSTREAM)
    (CL:UNWIND-PROTECT
        (PROG ((*PRINT-BASE* 10)
            (*UPPER-CASE-FILE-NAMES* NIL)
            (MESSAGES (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER))
            (OLDLASTMSG# (fetch (MAILFOLDER %#OFMESSAGES) of FOLDER))
            (FIRSTSELECTED (fetch (MAILFOLDER FIRSTSELECTEDMESSAGE) of FOLDER))
            (LASTSELECTED (fetch (MAILFOLDER LASTSELECTEDMESSAGE) of FOLDER))
            COMPACTLENGTH GOODMSGSPTR MSGLIST RESULT NEWDATE)
            (LAB.PROMPTPRINT FOLDER "Compacting folder... ")
        [COND
            ((> LASTSELECTED LASTGOODMSG#)
                ; There are selections in the compacting region
                (COND
                    ((> FIRSTSELECTED LASTGOODMSG#)
                        ; All selections are there, so recompute completely
                        (SETQ LASTSELECTED (SETQ FIRSTSELECTED NIL)))
                    (T
                        ; Some selections before it, so only Last changes
                        (SETQ LASTSELECTED (LAB.REV.FIND.SELECTED.MSG FOLDER FIRSTSELECTED LASTGOODMSG#])
                    [SETQ GOODMSGSPTR (COND
                        ((EQ LASTGOODMSG# 0)
                            0)
                        (T (fetch (LAFITEMSG END) of (NTHMESSAGE MESSAGES LASTGOODMSG#]
                            ; End of the region that we leave alone
                    (SETQ COMPACTLENGTH (for I from (ADD1 LASTGOODMSG#) to OLDLASTMSG# bind MSG
                        unless (fetch (LAFITEMSG DELETED?) of (SETQ MSG (NTHMESSAGE MESSAGES I))
                            )
                        sum (fetch (LAFITEMSG MESSAGELENGTH) of MSG)))
                [COND
                    ((NEQ COMPACTLENGTH 0)
                        (if (if (EQ LASTGOODMSG# 0)
                            then
                                ; Will have to rewrite whole folder
                                (SMART-RENAMEFILE FOLDERSTREAM)
                            elseif (AND (fetch (MAILFOLDER FOLDEROUTOFORDER) of FOLDER)
                                (SMART-RENAMEFILE FOLDERSTREAM))
                            then
                                ; Will it be faster to write a brand new file and rename it to the
                                ; destination than to do the overwriting stuff, given the extra
                                ; messages we'll have to save on the end in case of disaster?
                                (> (\LAFITE.COMPACT.EXTRA FOLDER LASTGOODMSG# GOODMSGSPTR GOODMSGSPTR)
                                    GOODMSGSPTR))
                        then [SETQ SCRATCHFILE (OPENSTREAM (PACKFILENAME.STRING 'VERSION NIL 'EXTENSION
                            (CONCAT (UNPACKFILENAME.STRING FOLDERSTREAM
                                'EXTENSION)
                                "-compacted")
                                'BODY FOLDERSTREAM)
                            'OUTPUT
                            'NEW

```

```

                                `((LENGTH , (+ GOODMSGSPTR COMPACTLENGTH))
                                  (SEQUENTIAL T)
                                  (TYPE LAFITE])
(COPYBYTES FOLDERSTREAM SCRATCHFILE 0 GOODMSGSPTR)
(LINELENGTH T SCRATCHFILE)
(SETQ MSGLIST (\LAFITE.COMPACT.FOLDER2 FOLDER FOLDERSTREAM LASTGOODMSG#
                                GOODMSGSPTR SCRATCHFILE T))
(SETQ SCRATCHFILE (CLOSEF SCRATCHFILE))
(SETQ NEWDATE (GETFILEINFO SCRATCHFILE 'ICREATIONDATE))
(SETQ FOLDERSTREAM (FULLNAME FOLDERSTREAM))
(\LAFITE.CLOSE.FOLDER FOLDER T)
(SETQ STATE :NEW)
(CL:MULTIPLE-VALUE-SETQ (RESULT CONDITION)
  (\LAFITE.RENAMEFILE SCRATCHFILE FOLDERSTREAM))
(if (NULL RESULT)
    then (RETURN)
    else ; Scratch file now gone
      (SETQ SCRATCHFILE NIL)
      (SETQ STATE :OPEN) ; At this point, file is inconsistent with in-core structures.
      (SETQ TOCSTREAM (\LAFITE.INVALIDATE.TOC FOLDER)))
else (SETQ ORIGEOF (GETEOFPTR FOLDERSTREAM)) ; Save info for abort
      (SETQ STATE :APPEND)
      [SETQ MSGLIST (\LAFITE.COMPACT.FOLDER2 FOLDER FOLDERSTREAM LASTGOODMSG#
                                GOODMSGSPTR (SETQ SCRATCHFILE (LA.OPENTEMPFILE 'SCRATCH
                                          'BOTH
                                          'NEW COMPACTLENGTH))

;; Up til now, you could abort and nothing bad would happen--the folder hasn't been written on yet.
(SETFILEPTR FOLDERSTREAM GOODMSGSPTR)
                                ; set the pointer to the end of the good messages
(SETQ STATE :OPEN) ; We're about to make the world inconsistent
(SETQ TOCSTREAM (\LAFITE.INVALIDATE.TOC FOLDER))
(COPYBYTES SCRATCHFILE FOLDERSTREAM 0 -1)
                                ; copy the scratch file to the end of the good messages left in the
                                ; original file
(FORCEOUTPUT FOLDERSTREAM) ; Ensure that all those writes succeeded, before we update core
                                ; and truncate the file below.
)
[for MSG in MSGLIST do ; Now that it's all written, update the incore structures
  (if (LISTP MSG)
      then ; Need to fix stamp & msg length
        (replace (LAFITEMSG MESSAGELENGTH) of (CAR MSG)
          with (CADDR MSG))
        (replace (LAFITEMSG STAMPLENGTH) of (CAR MSG)
          with (CADR MSG))
        (SETQ MSG (CAR MSG)))
        (replace (LAFITEMSG MARKSCHANGEDINFILE?) of MSG with NIL)
        (replace (LAFITEMSG BEGIN) of MSG with GOODMSGSPTR)
        (add GOODMSGSPTR (fetch (LAFITEMSG MESSAGELENGTH) of MSG))
        (replace (LAFITEMSG %#) of MSG with (add LASTGOODMSG# 1))
        (SETA MESSAGES LASTGOODMSG# MSG)
        (COND
          ((fetch (LAFITEMSG SELECTED?) of MSG)
            (COND
              ((NOT FIRSTSELECTED)
                (SETQ FIRSTSELECTED LASTGOODMSG#)))
              (SETQ LASTSELECTED LASTGOODMSG#)))
          (if [AND (NOT NEWDATE)
              (NOT (= GOODMSGSPTR (GETFILEPTR FOLDERSTREAM)
                then (HELP "Miscalculation in Lafite Expunge" (LIST GOODMSGSPTR 'NEQ (GETFILEPTR
                  FOLDERSTREAM)
                (replace (MAILFOLDER %OFMESSAGES) of FOLDER with LASTGOODMSG#)
                (replace (MAILFOLDER FIRSTSELECTEDMESSAGE) of FOLDER with (OR FIRSTSELECTED 1))
                (replace (MAILFOLDER LASTSELECTEDMESSAGE) of FOLDER with (OR LASTSELECTED 0))
                (for I from (ADD1 LASTGOODMSG#) to OLDLASTMSG# do
                  ; Erase entries beyond the new end of messages
                  (SETA MESSAGES I NIL))
                (if NEWDATE
                    then ; Did via separate file, so get the date right
                      (replace (MAILFOLDER FOLDERCREATIONDATE) of FOLDER with NEWDATE)
                    else ; Truncate to new length
                      (SETFILEPTR FOLDERSTREAM GOODMSGSPTR)
                      (SETFILEINFO FOLDERSTREAM 'LENGTH GOODMSGSPTR))
                (replace (MAILFOLDER FOLDEREOFPTR) of FOLDER with GOODMSGSPTR)
                (SETQ STATE :END)
                (RETURN TOCSTREAM))

;; Cleanup code--this runs even if we are aborted.
(if (NEQ STATE :END)
    then (LAB.PROMPTPRINT FOLDER " aborted.")
    [if (EQ STATE :OPEN)
        then (LAB.PROMPTPRINT FOLDER " Folder is now in an inconsistent state and must be
          rebrowsed.")
        else ; We have not yet overwritten anything, so folder is still
          ; consistent, mainly

```

```

      (if (AND (EQ STATE :APPEND)
              (> (GETEOFPTR FOLDERSTREAM)
                 ORIGEOF))
          then
              ; We have written stuff to end of file--delete it
              (SETFILEPTR FOLDERSTREAM ORIGEOF)
              (SETFILEINFO FOLDERSTREAM 'LENGTH ORIGEOF))
      (if (EQ STATE :NEW)
          then
              ; The RENAMEFILE failed
              (LAB.FORMAT FOLDER " Help! Could not replace mail file with compacted
                                file~@[ because ~A~]. The compacted file is stored as ~A. You must
                                rename this file to ~A before proceeding. " CONDITION SCRATCHFILE
                                FOLDERSTREAM)
          else (LET ((WINDOW (fetch (MAILFOLDER BROWSERWINDOW) of FOLDER)))
                  (if (OPENWP WINDOW)
                      then
                          ; Window was cleared, so redisplay it now
                          (REDISPLAYW WINDOW)
                      (if TOCSTREAM
                          then (CLOSEF TOCSTREAM)))
                  (\LAFITE.CLOSE.FOLDER FOLDER T)
                  (if SCRATCHFILE
                      then (if (STREAMP SCRATCHFILE)
                              then (SETQ SCRATCHFILE (CLOSEF SCRATCHFILE))
                              (DELFILE SCRATCHFILE))
                      (if (AND (EQ STATE :END)
                              (EQ LAFITEVERIFIFLG 'ALL))
                          then (VERIFMAILFOLDER FOLDER))))))

```

## (\LAFITE.COMPACT.FOLDER2

```

[LAMBDA (FOLDER FOLDERSTREAM LASTGOODMSG# GOODMSGSPTR SCRATCHFILE NEWFILEP)
    ; Edited 2-May-89 11:09 by bvm

```

;; We want to compact FOLDER's messages beyond LASTGOODMSG#, which ends at GOODMSGSPTR. We map down the messages moving  
 ;; the undeleted ones into SCRATCHFILE (which is a new mail file if NEWFILEP is true). Return a list of the messages written to SCRATCHFILE.  
 ;; If the stamp length of any message changed, the corresponding element is not the message but a list (msg newstamplength newmsglength).

```

(for I from (ADD1 LASTGOODMSG#) to (fetch (MAILFOLDER %#OFMESSAGES) of FOLDER)
  bind (MESSAGES _ (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER))
  (NEXTFILEPTR _ GOODMSGSPTR)
  MSG TMP
  unless (fetch (LAFITEMSG DELETED?) of (SETQ MSG (NTHMESSAGE MESSAGES I)))
  collect (MAYBEVERIFMSG MSG FOLDER)
  (LET* ((BEGIN (fetch (LAFITEMSG BEGIN) of MSG))
         (STAMPLENGTH (fetch (LAFITEMSG STAMPLENGTH) of MSG))
         (MSGLENGTH (fetch (LAFITEMSG MESSAGELENGTH) of MSG))
         (BODYLENGTH (- MSGLENGTH STAMPLENGTH))
         (NEWSTAMPLENGTH (LA.PRINTHEADER SCRATCHFILE BODYLENGTH)))
    (WRITEFOLDERMARKBYTES MSG NIL SCRATCHFILE)
    (BOUT SCRATCHFILE (CHARCODE CR))
    (COPYBYTES FOLDERSTREAM SCRATCHFILE (+ BEGIN STAMPLENGTH)
              (+ BEGIN MSGLENGTH))
    (if (NOT NEWFILEP)
        then (if (< BEGIN NEXTFILEPTR)
                 then
                     ;; By the time we get to copying this message to the main file, we will already have overwritten at least
                     ;; part of the original message. That means we could lose messages if a crash occurs here. So
                     ;; instead, copy this message to after the eof as a saving place
                     (SETFILEPTR FOLDERSTREAM -1)
                     [LA.PRINTHEADER FOLDERSTREAM BODYLENGTH NIL
                      (+ (NCHARS BEGIN)
                         (CONSTANT (ADD1 (NCHARS "**duplicate**"))
                        (BOUT FOLDERSTREAM DELETEDFLAG)
                        ; Make message look deleted ordinarily
                        (BOUT FOLDERSTREAM UNSEENFLAG)
                        (BOUT FOLDERSTREAM DUPLICATEMARK)
                        (BOUT FOLDERSTREAM (CHARCODE CR))
                        (PRIN3 "**duplicate*" FOLDERSTREAM)
                        ; Mark as duplicate and tell where
                        (PRIN3 BEGIN FOLDERSTREAM)
                        (BOUT FOLDERSTREAM (CHARCODE CR))
                        (COPYBYTES SCRATCHFILE FOLDERSTREAM (- (SETQ TMP (GETFILEPTR SCRATCHFILE))
                                                                BODYLENGTH)
                                                                TMP)
                        (SETFILEPTR SCRATCHFILE TMP))
                        (add NEXTFILEPTR BODYLENGTH NEWSTAMPLENGTH))
                     (if (EQ STAMPLENGTH NEWSTAMPLENGTH)
                         then
                             ; normal case, no length changed
                             MSG
                         else (LIST MSG NEWSTAMPLENGTH (+ BODYLENGTH NEWSTAMPLENGTH))

```

## (\LAFITE.COMPACT.EXTRA

```

[LAMBDA (FOLDER LASTGOODMSG# GOODMSGSPTR STOPAT)
    ; Edited 5-May-89 11:25 by bvm

```

;; Returns an estimate of the length of stuff we'll have to append to folder while compacting it, due to messages being out of order. If the estimate  
 ;; ever exceeds STOPAT we can stop counting and return the current estimate.

```

(for I from (ADD1 LASTGOODMSG#) to (fetch (MAILFOLDER %#OFMESSAGES) of FOLDER)
  bind (MESSAGES _ (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER))

```

```

(NEXTFILEPTR _ GOODMSGSPTR)
(EXTRALENGTH _ 0)
MSG
unless (fetch (LAFITEMSG DELETED?) of (SETQ MSG (NTHMESSAGE MESSAGES I)))
do (LET ((MSGLENGTH (fetch (LAFITEMSG MESSAGELENGTH) of MSG)))
    (if (< (fetch (LAFITEMSG BEGIN) of MSG)
        NEXTFILEPTR)
    then
        ;; By the time we get to copying this message to the main file, we will already have overwritten at least part of the original
        ;; message. That means we could lose messages if a crash occurs here. So instead, copy this message to after the eof
        ;; as a saving place
        (if (> [add EXTRALENGTH MSGLENGTH (CONSTANT (+ 6 (NCHARS "duplicate*")
            STOPAT)
            then (RETURN EXTRALENGTH)))
        (add NEXTFILEPTR MSGLENGTH))
    finally (RETURN EXTRALENGTH])

```

**(\LAFITE.INVALIDATE.TOC**

```

[LAMBDA (FOLDER) ; Edited 5-May-89 11:45 by bvm

```

```

;; Invalidate the toc file for this folder by trashing the password. Returns the stream, if any.

```

```

(LET* ((*UPPER-CASE-FILE-NAMES* NIL)
    (NAME (INFILEP (TOCFILENAME FOLDER)))
    TOCSTREAM)
    (if [AND NAME (SETQ TOCSTREAM (IGNORE-ERRORS (\LAFITE.OPENSTREAM NAME 'BOTH 'OLD NIL NIL 'BINARY]
        then (WORDOUT TOCSTREAM (LOGXOR 65535 LAFITETOCPASSWORD))
        (FORCEOUTPUT TOCSTREAM)
        TOCSTREAM])

```

**(\LAFITE.RENAMEFILE**

```

[LAMBDA (SCRATCHFILE FOLDERNAME) ; Edited 2-May-89 11:33 by bvm

```

```

;; Called to replace FOLDERNAME with SCRATCHFILE, e.g., as a result of a scavenger. On success, returns the new file name, otherwise returns
;; NIL and, if an error was signaled, a CONDITION.

```

```

(LET ((*UPPER-CASE-FILE-NAMES* NIL)
    (IGNORE-ERRORS (DELFIL FOLDERNAME)
        (RENAMEFILE SCRATCHFILE FOLDERNAME]))

```

**(SMART-RENAMEFILEP**

```

[LAMBDA (OBJECT) ; Edited 1-May-89 12:31 by bvm

```

```

;; true if RENAMEFILE can be done intelligently on this path/stream/device

```

```

(LET [(DEV (CL:TYPECASE OBJECT
    (FDEV OBJECT)
    (STREAM (fetch (STREAM DEVICE) of OBJECT))
    (T (\GETDEVICEFROMNAME OBJECT T)))]
    (AND DEV (CASE (fetch (FDEV RENAMEFILE) of DEV)
        ((NIL \GENERIC.RENAMEFILE) NIL)
        (T T)))]

```

**(LA.OPENTEMPFILE**

```

[LAMBDA (EXTENSION ACCESS RECOG LENGTH) ; Edited 3-Sep-87 16:29 by bvm:

```

```

(LET [(STREAM (OPENSTREAM (PACKFILENAME.STRING 'HOST 'SCRATCH 'NAME 'LAFITETEMPORARY 'EXTENSION EXTENSION)
    (OR ACCESS 'OUTPUT)
    (OR RECOG 'NEW)
    NIL
    (AND LENGTH (LIST (LIST 'LENGTH LENGTH)

```

```

(COND
    (STREAM (WHENCLOSE STREAM 'CLOSEALL 'NO)
        (LINELENGTH MAX.SMALLP STREAM)
        (if NIL
            then

```

```

; save them so they can be deleted by LAFITE.QUIT

```

```

;; no need to keep list--they vanish via gc

```

```

(push \LAFITE.TEMPFILES (FULLNAME STREAM)))
STREAM])

```

```

)

```

```

(DEFINEQ

```

**(\LAFITE.UPDATE.FOLDER**

```

[LAMBDA (FOLDER) ; Edited 28-Apr-89 10:55 by bvm

```

```

;;; Write out any changed marks in MAILFOLDER, but don't expunge deleted messages

```

```

(LET ((MESSAGES (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER))
    OUTSTREAM MSG)
    (if (fetch (MAILFOLDER FOLDEROUTOFORDER) of FOLDER)
        then (LAB.PROMPTPRINT FOLDER "Folder has been reordered, so can't simply write out changes--must
            Expunge."))
    (LAB.PROMPTPRINT FOLDER "Writing out changes...")
    [for MSG# from (fetch (MAILFOLDER FIRSTCHANGEDMESSAGE) of FOLDER) to (fetch (MAILFOLDER %#OFMESSAGES)

```

```

                                of FOLDER)
when (fetch (LAFITEMSG MARKSCHANGEDINFILE?) of (SETQ MSG (NTHMESSAGE MESSAGES MSG#)))
do (WRITEFOLDERMARKBYTES MSG FOLDER (OR OUTSTREAM (SETQ OUTSTREAM (\LAFITE.OPEN.FOLDER
                                FOLDER
                                'OUTPUT :ABORT]

(\LAFITE.CLOSE.FOLDER FOLDER)
(LAB.PROMPTPRINT FOLDER (COND
                        (OUTSTREAM " done. ")
                        (T "nothing changed. ")))
[if (NOT (fetch (MAILFOLDER FOLDERNEEDSEXPUNGE) of FOLDER))
    then ; Everything is up to date now.
        (replace (MAILFOLDER FIRSTCHANGEDMESSAGE) of FOLDER with (ADD1 (fetch (MAILFOLDER %#OFMESSAGES)
                                of FOLDER]
(replace (MAILFOLDER FOLDERNEEDSUPDATE) of FOLDER with NIL])

```

## (\LAFITE.UPDATE.CONTENTENTS

```

[LAMBDA (MAILFOLDER LASTUNCHANGEDMESSAGE# TOCSTREAM) ; Edited 1-May-89 13:02 by bvm

```

```

;;; Update the TOC file for MAILFOLDER, assuming that entries up to LASTUNCHANGEDMESSAGE# are okay.

```

```

(COND
  ((NLSETQ (\LAFITE.UPDATE.CONTENTENTS1 MAILFOLDER LASTUNCHANGEDMESSAGE# TOCSTREAM))
    (LAB.PROMPTPRINT MAILFOLDER " done. "))
  (T (LAB.PROMPTPRINT MAILFOLDER " failed. ")))
;; FOLDERNEEDSUPDATE set to NIL now either because toc was completely written or because toc was deleted on error, in which case 'Update
;; Table of Contents' is still needed
(replace (MAILFOLDER FOLDERNEEDSUPDATE) of MAILFOLDER with NIL])

```

## (\LAFITE.UPDATE.CONTENTENTS1

```

[LAMBDA (FOLDER LASTUNCHANGEDMESSAGE# TOCSTREAM) ; Edited 1-May-89 13:02 by bvm

```

```

;; Write the table of contents file for FOLDER. LASTUNCHANGEDMESSAGE# is the last message in the folder before compacting changes set in.
;; Prior to that message, we'll only have to update flag bytes if anything. If TOCSTREAM is supplied, it is a stream already open for i/o on the toc
;; file (from Expunge, which invalidates the toc password before trashing the mail file).

```

```

(RESETLST
  (LET ((*UPPER-CASE-FILE-NAMES* NIL)
        (LASTMSG# (fetch (MAILFOLDER %#OFMESSAGES) of FOLDER))
        (MESSAGES (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of FOLDER))
        (TOCSTART LAFITETOCHHEADERLENGTH)
        (FIRSTMSG# MSG)
        (COND
          (> LASTMSG# 0)
          (LAB.PROMPTPRINT FOLDER "Writing table of contents...")
          (RESETSAVE NIL (LIST [FUNCTION (LAMBDA (STREAM FOLDER)
                                (SETQ STREAM (CLOSEF STREAM))
                                (COND
                                  (RESETSTATE
                                    ; If we aborted out, assume toc is garbage
                                    (replace (MAILFOLDER TOCLASTMESSAGE#) of FOLDER
                                      with 0)
                                    (DELFILE (FULLNAME STREAM)
                                      [OR TOCSTREAM (SETQ TOCSTREAM (OPENSTREAM (TOCFILENAME FOLDER)
                                          ' BOTH
                                          ' OLD/NEW
                                          ' ((TYPE BINARY)
                                          FOLDER))
                                    (SETQ LASTUNCHANGEDMESSAGE# (IMIN LASTUNCHANGEDMESSAGE# (fetch (MAILFOLDER TOCLASTMESSAGE#)
                                          of FOLDER)))
                                ]COND
                                  ((EQ (GETEOFPTR TOCSTREAM)
                                    0)
                                    (SETQ LASTUNCHANGEDMESSAGE# 0))
                                  ((AND (EQ LASTUNCHANGEDMESSAGE# 0)
                                    (NEQ (PROGN (SETFILEPTR TOCSTREAM BYTESPERWORD)
                                      (WORDIN TOCSTREAM))
                                      LAFITEVERSION#))
                                    ; A version number change, rewrite entire toc
                                    )
                                  (T
                                    ; TOC already existed, just update it
                                    (for MSG# from 1 to LASTUNCHANGEDMESSAGE# do (COND
                                      ((fetch (LAFITEMSG MARKSCHANGEDINTOC?)
                                        of (SETQ MSG (NTHMESSAGE MESSAGES MSG#)
                                        ))
                                      ; Message not compacted out, but its mark bytes have changed
                                      (SETFILEPTR TOCSTREAM TOCSTART)
                                      (WRITETOCMARKBYTES MSG TOCSTREAM)
                                      (replace (LAFITEMSG MARKSCHANGEDINTOC?)
                                        of MSG with NIL)))
                                      (add TOCSTART (fetch (LAFITEMSG TOCLENGTH)
                                        of MSG]
                                    (SETFILEPTR TOCSTREAM TOCSTART)
                                    (for MSG# from (ADD1 LASTUNCHANGEDMESSAGE#) to LASTMSG# do (WRITETOCENTRY (NTHMESSAGE MESSAGES
                                        MSG#)
                                        TOCSTREAM) )

```

```

      (SETFILEINFO TOCSTREAM 'LENGTH (GETFILEPTR TOCSTREAM))
      (SETFILEPTR TOCSTREAM 0) ; Now write the header info
      (WORDOUT TOCSTREAM LAFITEPASSWORD)
      (WORDOUT TOCSTREAM LAFITEVERSION#)
      (FIXPOUT TOCSTREAM (fetch (MAILFOLDER FOLDEREOPTR) of FOLDER))
      (WORDOUT TOCSTREAM LASTMSG#))
      ((SETQ TOCSTREAM (INFILEP (TOCFILENAME FOLDER)))
      (LAB.PROMPTPRINT FOLDER "Deleting table of contents...")
      (DELFILE TOCSTREAM)))
      (replace (MAILFOLDER TOCLASTMESSAGE#) of FOLDER with LASTMSG#))]]

```

**(WRITETOCENTRY**

[LAMBDA (MSG STREAM)

; Edited 28-Apr-89 12:18 by bvm

;;; Dumps TOC entry for MSG on STREAM

```

      (PROG ((TOCLENGTH 6)
      (MESSAGELENGTH (fetch (LAFITEMSG MESSAGELENGTH) of MSG))
      DAT NC) ; TOCLENGTH 6 counts for 3 bytes of message length, 1 byte
      ; each of stamplength, flags and mark.

      (WRITETOCMARKBYTES MSG STREAM)
      (COND
      ((> MESSAGELENGTH MAX.SMALLP)
      ;; Ugh, length greater than fits in one word. Would be surprised if this ever happens, but file format permits it
      (LET ((HIWORD (LRSH MESSAGELENGTH BITSPERWORD))
      (if (> HIWORD 254)
      then ; a very long length, escape to 4 bytes of length
      (BOUT STREAM 255)
      (WORDOUT STREAM HIWORD)
      (add TOCLENGTH 2)
      else (BOUT STREAM HIWORD))
      (WORDOUT STREAM (LOGAND MESSAGELENGTH MAX.SMALLP)))
      (T ; Normal case, a small length
      (BOUT STREAM 0)
      (WORDOUT STREAM MESSAGELENGTH)))
      (BOUT STREAM (fetch (LAFITEMSG STAMPLENGTH) of MSG))
      (if (fetch (LAFITEMSG DATEFETCHED?) of MSG) ; Write 4 bytes of idate
      then
      (\BOUTS STREAM MSG (UNFOLD (INDEXF (FETCH (LAFITEMSG IDATE))
      BYTESPERWORD)
      4)
      (add TOCLENGTH 4))
      (if (NOT (fetch (LAFITEMSG DATEKNOWN?) of MSG)) ; Write 6 bytes of ascii string
      then
      (PRIN3 [COND
      ((EQ [SETQ NC (NCHARS (SETQ DAT (fetch (LAFITEMSG DATE) of MSG]
      6) ; The usual case
      DAT)
      (T (OR (SUBSTRING DAT 1 6)
      (CONCAT DAT (ALLOCSTRING (IDIFFERENCE 6 NC)
      (CHARCODE SPACE]
      STREAM)
      (add TOCLENGTH 6))
      (add TOCLENGTH (LA.PRINTSHORTSTRING STREAM (fetch (LAFITEMSG SUBJECT) of MSG)))
      (add TOCLENGTH (LA.PRINTSHORTSTRING STREAM (fetch (LAFITEMSG FROM) of MSG)))
      (add TOCLENGTH (LA.PRINTSHORTSTRING STREAM (fetch (LAFITEMSG TO) of MSG)))
      (replace (LAFITEMSG TOCLENGTH) of MSG with TOCLENGTH)
      (replace (LAFITEMSG MARKSCHANGEDINTOC?) of MSG with NIL])

```

**(WRITETOCMARKBYTES**

[LAMBDA (MSG STREAM)

(\* bvm%: "20-Feb-84 12:53")

```

      (BOUT STREAM (fetch (LAFITEMSG MSGFLAGBITS) of MSG))
      (BOUT STREAM (fetch (LAFITEMSG MARKCHAR) of MSG])

```

**(WRITEFOLDERMARKBYTES**

[LAMBDA (MSG MAILFOLDER OUTSTREAM)

; Edited 21-Apr-89 12:41 by bvm

;;; Write the three magic flag bytes for MSG onto OUTSTREAM. If MAILFOLDER is supplied, then OUTSTREAM is MAILFOLDER's own file, and we  
 ;;; will first position OUTSTREAM accordingly--otherwise caller has positioned us properly.

```

      [COND
      (MAILFOLDER (MAYBEVERIFYSMSG MSG MAILFOLDER)
      (SETFILEPTR OUTSTREAM (fetch (LAFITEMSG BEGIN) of MSG))
      (OR (LA.READSTAMP OUTSTREAM)
      (HELP))
      (COND
      ((fetch (LAFITEMSG MESSAGELENGTHCHANGED?) of MSG)
      ; Length is different in core and on file. This is for scavenging
      ; purposes
      (LET ((LENPOS (GETFILEPTR OUTSTREAM))
      LEN)
      (LA.READCOUNT OUTSTREAM T) ; Skip over current length
      (SETQ LEN (- (GETFILEPTR OUTSTREAM)

```

```

        (LENPOS 1)) ; Number of bytes of length--have to use the same format when
                    ; overwriting it
        (SETFILEPTR OUTSTREAM LENPOS)
        (LA.PRINTCOUNT (fetch (LAFITEMSG MESSAGELENGTH) of MSG)
          OUTSTREAM
          `(FIX ,LEN 10 T))
        (BIN OUTSTREAM) ; Skip over terminating space

    )
    (replace (LAFITEMSG MESSAGELENGTHCHANGED?) of MSG with NIL))
  (T ; Just skip over lengths
    (LA.READCOUNT OUTSTREAM T)
    (LA.READCOUNT OUTSTREAM T]
  (BOUT OUTSTREAM (COND
    ((fetch (LAFITEMSG DELETED?) of MSG)
      DELETEDFLAG)
    (T UNDELETEDFLAG)))
  (BOUT OUTSTREAM (COND
    ((fetch (LAFITEMSG SEEN?) of MSG)
      SEENFLAG)
    (T UNSEENFLAG)))
  (BOUT OUTSTREAM (fetch (LAFITEMSG MARKCHAR) of MSG))
  (if MAILFOLDER
    then (replace (LAFITEMSG MARKSCHANGEDINFILE?) of MSG with NIL])
  )

)

;; HARDCOPY

(DEFINEQ

(LAFITE.HARDCOPY.MESSAGES
  [CL:LAMBDA (FOLDER MESSAGES &OPTIONAL (BATCHFLG NIL BATCHP)) ; Edited 30-Aug-88 14:13 by bvm
    (AND MESSAGES (\LAFITE.HARDCOPY.PROC FOLDER NIL NIL (\COERCE.TO.MSGSLST MESSAGES)
      (if BATCHP
        then BATCHFLG
        else LAFITEHARDCOPYBATCHFLG))

(\LAFITE.HARDCOPY
  [LAMBDA (WINDOW FOLDER ITEM MENU) ; Edited 23-Aug-88 15:45 by bvm
    (\LAFITE.PROCESS `(, (FUNCTION \LAFITE.HARDCOPY.PROC)
      ',FOLDER
      ',ITEM
      ',MENU NIL ',LAFITEHARDCOPYBATCHFLG)
    'MESSAGEHARDCOPIER])

(\LAFITE.HARDCOPY.PROC
  [LAMBDA (MAILFOLDER ITEM MENU MSGSLST BATCHFLG) ; Edited 7-Feb-2022 12:00 by rmk
    ; Edited 23-Aug-88 15:37 by bvm
    (PROG (LCASEFILENAME TEXTSTREAM)
      (RESETLST
        (LA.RESETSHADE ITEM MENU (AND BATCHFLG LAFITEHARDCOPYBATCHSHADE))
        (WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of MAILFOLDER)
          (\LAFITE.MAYBE.CLEAR.PROMPT MAILFOLDER)
          [COND
            ((OR MSGSLST (NOT (LAB.ASSURE.SELECTIONS MAILFOLDER)))
              (LET (CONTINUEFLG)
                (OR MSGSLST (SETQ MSGSLST (LAB.SELECTED.MESSAGES MAILFOLDER)))
                (SETQ LCASEFILENAME (L-CASE (fetch (MAILFOLDER FULLFOLDERNAME) of MAILFOLDER)))
                [SETQ TEXTSTREAM (COND
                  [(AND BATCHFLG (SETQ CONTINUEFLG (fetch (MAILFOLDER HARDCOPYSTREAM)
                    of MAILFOLDER])
                    ((AND (NOT BATCHFLG)
                      LAFITEHARDCOPY.MIN.TOC
                      (>= (LENGTH MSGSLST)
                        LAFITEHARDCOPY.MIN.TOC))
                    (\LAFITE.HARDCOPY.HEADERS MAILFOLDER LCASEFILENAME MSGSLST))
                  (T ; Start fresh
                    (OPENTEXTSTREAM NIL NIL NIL NIL (LIST 'FONT LAFITEHARDCOPYFONT
                      ]
                    (\LAFITE.HARDCOPY.BODIES MAILFOLDER TEXTSTREAM MSGSLST CONTINUEFLG)
                    (COND
                      (BATCHFLG (\LAFITE.MARK.HARDCOPIED MAILFOLDER MSGSLST HARDCOPYBATCHMARK)
                        (replace (MAILFOLDER HARDCOPYSTREAM) of MAILFOLDER with TEXTSTREAM)
                        (replace (MAILFOLDER HARDCOPYMESSAGES) of MAILFOLDER
                          with (NCONC (fetch (MAILFOLDER HARDCOPYMESSAGES) of MAILFOLDER)
                            MSGSLST))
                        (SETQ TEXTSTREAM]))
                      (COND
                        (TEXTSTREAM ; Send to printer now...
                          (\LAFITE.TRANSMIT.HARDCOPY MAILFOLDER TEXTSTREAM MSGSLST LCASEFILENAME]))
                    ]
                  ]
                ]
              ]
            ]
          ]
        ]
      ]
    )
  )
)

```

(\LAFITE.HARDCOPY.HEADERS



```

[LAMBDA (MAILFOLDER LCASEFILENAME MESSAGES INCLUDE# TEXTSTREAM)
; Edited 7-Feb-2022 12:01 by rmk
; Edited 3-Jun-88 17:50 by bvm

(PROG ((OUTPUTFILE (OPENSTREAM '{NODIRCORE}' BOTH 'NEW))
TITLELEN TITLE TOCSTART TOCLEN FROMSTR SUBJLEFT DATELEFT TABSTOPS)
(LINELENGTH MAX.SMALLP OUTPUTFILE)
(for MSG in MESSAGES as N from 1 do
;; Each line consists of [<tab>#.<tab>]date<tab>from<tab>subject<cr>
(OR (fetch (LAFITEMSG PARSED?) of MSG)
(LAFITE.PARSE.MSG.FOR.TOC MSG MAILFOLDER))
(POSITION OUTPUTFILE 0)
[COND
(INCLUDE# (\OUTCHAR OUTPUTFILE (CHARCODE TAB))
(CL:FORMAT OUTPUTFILE "~D." N)
(\OUTCHAR OUTPUTFILE (CHARCODE TAB)
(PRIN3 (OR (fetch (LAFITEMSG DATE) of MSG)
UNSUPPLIEDFIELDSTR)
OUTPUTFILE)
(\OUTCHAR OUTPUTFILE (CHARCODE TAB))
(PRIN3 (OR (COND
((fetch (LAFITEMSG MSGFROMMEP) of MSG)
(PRIN3 "To: " OUTPUTFILE)
(OR (fetch (LAFITEMSG TO) of MSG)
(LAFITE.FETCH.TO.FIELD MSG MAILFOLDER)))
(T (fetch (LAFITEMSG FROM) of MSG)))
UNSUPPLIEDFIELDSTR)
OUTPUTFILE)
(\OUTCHAR OUTPUTFILE (CHARCODE TAB))
(PRIN3 (OR (fetch (LAFITEMSG SUBJECT) of MSG)
UNSUPPLIEDFIELDSTR)
OUTPUTFILE)
(TERPRI OUTPUTFILE))
(SETQ OUTPUTFILE (OPENSTREAM (CLOSEF OUTPUTFILE)
'INPUT))
(SETQ TITLE (CL:FORMAT NIL "Messages from ~A~%~%Listed on ~A~%~%~%" LCASEFILENAME (DATE)))
(SETQ TITLELEN (NCHARS TITLE))
[COND
(TEXTSTREAM
(TEDIT.INSERT TEXTSTREAM TITLE 1))
(T (SETQ TEXTSTREAM (OPENTEXTSTREAM (OPENSTRINGSTREAM TITLE)
(AND NIL (CREATEW NIL "Lafite headers"))
NIL NIL (LIST 'FONT LAFITEHARDCOPYFONT)
; Need to insert all this stuff at beginning of textstream
; Make title centered
(PROGN
(TEDIT.PARALOOKS TEXTSTREAM '(QUAD CENTERED)
1
(SUB1 TITLELEN))
(TEDIT.PARALOOKS TEXTSTREAM '(POSTPARALEADING 30)
(- TITLELEN 4)
1))
; Insert toc lines.
(PROGN
[SETQ TOCLEN (LA.TEDIT.INCLUDE TEXTSTREAM OUTPUTFILE (SETQ TOCSTART (ADD1 TITLELEN)
(TEDIT.INSERT TEXTSTREAM [CONSTANT (CONCATCODES (CHARCODE (FF)
(+ TOCSTART TOCLEN)))
; Formfeed after the insertion
; Now give the toc lines the appropriate tab settings.
(SETQ DATELEFT (COND
(INCLUDE# 30)
(T 0)))
[SETQ TABSTOPS (LIST (CONS (+ DATELEFT 50)
'LEFT)
(CONS (SETQ SUBJLEFT (+ DATELEFT 170))
'LEFT]
[COND
(INCLUDE# (push TABSTOPS '(20 . RIGHT)
(CONS DATELEFT 'LEFT)
(TEDIT.PARALOOKS TEXTSTREAM `(TABS (NIL ,@TABSTOPS)
LEFTMARGIN
, (+ SUBJLEFT 20))
TOCSTART
(SUB1 TOCLEN)))
(RETURN TEXTSTREAM])

```

## (\LAFITE.MARK.HARDCOPIED

```

[LAMBDA (MAILFOLDER MSGS MARK)
(WITH.MONITOR (fetch (MAILFOLDER FOLDERLOCK) of MAILFOLDER)
[LET ((MESSAGES (fetch (MAILFOLDER MESSAGEDESCRIPTORS) of MAILFOLDER))
(LASTMSG (fetch (MAILFOLDER %#OFMESSAGES) of MAILFOLDER))
N)
(COND
(MESSAGES
(for MSG in MSGS when (AND (ILEQ (SETQ N (fetch (LAFITEMSG %#) of MSG))
LASTMSG)
(EQ MSG (NTHMESSAGE MESSAGES N))
(SELCHARQ (fetch (LAFITEMSG MARKCHAR) of MSG)
(=? SPACE H)
T)
NIL))
(* bvm%: "26-Feb-86 12:34")

```

```

do ; If message doesn't already have a more interesting mark, set
; the hardcopy mark
(MARKMESSAGE MSG MAILFOLDER MARK)])

```

## (\LAFITE.TRANSMIT.HARDCOPY

```

[LAMBDA (MAILFOLDER TEXTSTREAM MSGSLST LCASEFILENAME) (* bvm%: " 2-Mar-84 13:32")

```

```

;; Sends TEXTSTREAM off to be hardcopied, then deletes it

```

```

(WITH.MONITOR \LAFITE.HARDCOPYLOCK ; Because press isn't reentrant yet
[TEDIT.HARDCOPY TEXTSTREAM NIL NIL (CONCAT [COND
((CDR MSGSLST)
(CONCAT (LENGTH MSGSLST)
" messages"))
(T (CONCAT "Message #" (fetch (LAFITEMSG %#)
of (CAR MSGSLST)
" from "
(OR LCASEFILENAME (L-CASE (fetch (MAILFOLDER FULLFOLDERNAME)
of MAILFOLDER]))
(CLOSEF TEXTSTREAM)
(DELFILE TEXTSTREAM)
(\LAFITE.MARK.HARDCOPIED MAILFOLDER MSGSLST HARDCOPYMARK])

```

## (\LAFITE.HARDCOPY.BODIES

```

[LAMBDA (MAILFOLDER TEXTSTREAM MESSAGES CONTINUEFLG NEXTMSG#) ; Edited 23-Aug-88 12:50 by bvm
(for MSGDESCRIPTOR in MESSAGES bind (NTHTIME _ CONTINUEFLG)
(INPUTFILE _ (\LAFITE.OPEN.FOLDER MAILFOLDER 'INPUT :ABORT))

```

```

do [COND
((NULL NTHTIME)
(SETQ NTHTIME T))
(OR LAFITENEWPAGEFLG CONTINUEFLG)
(\OUTCHAR TEXTSTREAM (CHARCODE FF))
(SETQ CONTINUEFLG))
(T (TERPRI TEXTSTREAM)
(COND
((NOT NEXTMSG#)
(PRIN3 LAFITEHARDCOPYSEPARATOR TEXTSTREAM)
(TERPRI TEXTSTREAM)
(COND
(NEXTMSG# (CL:FORMAT TEXTSTREAM "Message ~D~%~%~%" NEXTMSG#)
(add NEXTMSG# 1)))
(\LAFITE.APPEND.MESSAGE.BODY TEXTSTREAM INPUTFILE MSGDESCRIPTOR \LAPARSE.DONT.HARDCOPY.HEADERS)
(TEDIT.CARETLOOKS TEXTSTREAM LAFITEHARDCOPYFONT])

```

## (\LAFITE.APPEND.MESSAGE.BODY

```

[LAMBDA (TEXTSTREAM MSGSTREAM MSGDESCRIPTOR FILTERS) ; Edited 5-Aug-93 20:20 by bvm

```

```

;; Appends the text of the indicated message to TEXTSTREAM, filtering out any header fields found in FILTERS

```

```

(LET ((START (fetch (LAFITEMSG START) of MSGDESCRIPTOR))
(END (fetch (LAFITEMSG END) of MSGDESCRIPTOR))
(EOF (GETEOFPTR TEXTSTREAM))
FILTERED)
(if FILTERS
then (SETQ FILTERED (LAFITE.NEW.PARSE.HEADER MSGSTREAM FILTERS START END)))
(TEDIT.SETSEL TEXTSTREAM (ADD1 EOF)
0
'LEFT)
(TEDIT.INCLUDE TEXTSTREAM MSGSTREAM START END)
; Get selection right for TEDIT.INCLUDE
[if FILTERED
then (if [NOT (= (GETEOFPTR TEXTSTREAM)
(+ EOF (- END START)
then ; Rats, we have to recalculate more slowly now, since there
; could be ns chars in header. TEdit counts them differently than
; the plain text file does
(SETQ FILTERED (LAFITE.PARSE.HEADER TEXTSTREAM FILTERS EOF)))
(for PAIR in FILTERED do ; Note: we are depending on the pairs being in reverse order
; from the parse, so that the deletions do not affect the char
; count
(TEDIT.DELETE TEXTSTREAM (+ EOF (- (CAR PAIR)
START)
1)
(- (CADR PAIR)
(CAR PAIR)
(TEDIT.SETSEL TEXTSTREAM (ADD1 (GETEOFPTR TEXTSTREAM))
0)
(SETFILEPTR TEXTSTREAM -1])

```

## (\LAFITE.DO.PENDING.HARDCOPY

```

[LAMBDA (FOLDER) ; Edited 20-Jan-89 14:29 by bvm

```

```

(LET ((TEXTSTREAM (fetch (MAILFOLDER HARDCOPYSTREAM) of FOLDER))
(MSGSLST (fetch (MAILFOLDER HARDCOPYMESSAGES) of FOLDER)))
(COND
(TEXTSTREAM (LAB.PROMPTPRINT FOLDER T "Hardcopying... ")

```

```

(COND
  ((AND LAFITEHARDCOPY.MIN.TOC (>= (LENGTH MSGSLST)
                                     LAFITEHARDCOPY.MIN.TOC))
   (\LAFITE.HARDCOPY.HEADERS FOLDER (L-CASE (fetch (MAILFOLDER FULLFOLDERNAME) of FOLDER))
                                     MSGSLST NIL TEXTSTREAM)))
  (\LAFITE.TRANSMIT.HARDCOPY FOLDER TEXTSTREAM MSGSLST)
  (\LAFITE.CLEAR.HARDCOPY.STATE FOLDER)
  (LAB.PROMPTPRINT FOLDER "done. "))

```

## (\LAFITE.CANCEL.HARDCOPY

```

[LAMBDA (FOLDER) ; Edited 20-Jan-89 14:29 by bvm
  (LET ((PENDING (fetch (MAILFOLDER HARDCOPYMESSAGES) of FOLDER)))
    (if (NOT PENDING)
        then (LAB.PROMPTPRINT FOLDER "No messages are queued for hardcopy")
        elseif (LAB.MOUSECONFIRM FOLDER "Click LEFT to cancel hardcopy of ~D message~:P" (LENGTH PENDING))
        then (for MSG in PENDING do ; Set mark back to space
              (MARKMESSAGE MSG FOLDER SEENMARK))
    (\LAFITE.CLEAR.HARDCOPY.STATE FOLDER])

```

## (\LAFITE.CLEAR.HARDCOPY.STATE

```

[LAMBDA (FOLDER) ; Edited 20-Jan-89 14:28 by bvm
  ;; Clear all the places that think there is pending hardcopy
  (replace (MAILFOLDER HARDCOPYSTREAM) of FOLDER with (replace (MAILFOLDER HARDCOPYMESSAGES) of FOLDER
                                                                with NIL))
  (LET ((MENU (fetch (MAILFOLDER BROWSERMENU) of FOLDER))) ; Take the speckle off the menu
    (SHADEITEM (LA.MENU.ITEM (FUNCTION \LAFITE.HARDCOPY)
                             MENU)
               MENU WHITESHADE))

```

)

```

(ADDTOVAR LAFITEEXTRAMENUITEMS ("Cancel Pending Hardcopy" '\LAFITE.CANCEL.HARDCOPY "Forget about hardcopying
the messages so far marked for hardcopy."))

```

```

(RPAQ? LAFITEHARDCOPYBATCHFLG NIL)

```

```

(RPAQ? LAFITEHARDCOPY.MIN.TOC NIL)

```

```

(RPAQ? LAFITEDISPLAYAFTERDELETEFLG T)

```

```

(RPAQ? LAFITEMOVETOCONFIRMFLG 'ALWAYS)

```

```

(RPAQ? LAFITENEWPAGEFLG T)

```

```

(RPAQ? LAFITEENDOFMESSAGESTR "--End of message--")

```

```

(RPAQ? LAFITEENDOFMESSAGEFONT (FONTCREATE ' (TIMESROMAN 10 ITALIC)))

```

```

(RPAQ? LAFITE.DISPLAY.SIZE ' (500 . 300))

```

```

(RPAQ? LAFITE.BROWSER.LAYOUTS NIL)

```

```

(RPAQ? LAFITE.MIDDLE.UPDATE ' (:EXPUNGE :SHRINK :CONFIRM))

```

```

(RPAQ? LAFITEHARDCOPYBATCHSHADE 1025)

```

```

(RPAQ? LAFITEHARDCOPYSEPARATOR "%
Next Message -----%
")

```

;; Obsolete

```

(RPAQ? LAFITEDISPLAYREGION (CREATEREGION 375 25 600 335))

```

```

(DECLARE%: DOEVAL@COMPILE DONTCOPY

```

```

(FILESLoad (SOURCE)
  LAFITE-DECLS)

```

```

(DECLARE%: DOEVAL@COMPILE DONTCOPY

```

```

(LOCALVARS . T)
)
)

```

```

(DECLARE%: DONTVAL@LOAD DOEVAL@COMPILE DONTCOPY COMPILERVERS

```

```

(ADDTOVAR NLAMA )

```

```

(ADDTOVAR NLAML )

```

```

(ADDTOVAR LAMA LAFITE.HARDCOPY.MESSAGES)
)

```

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