```
(RPAQQ USPSCOMS
      (;; Image Objects and functions for dealing with various kinds of mail.
        (COMS ;; FIMs -- "Facing Identification Marks" used with Business Reply Mail.  The top of a FIM must be within 1/8" of the top of the envelope
             ;; or card, and the right edge of the FIM must be 2" +/- 1/8" from the right edge of the card.  You can tilt the FIM no more than 5
             ;; degrees from vertical.
             (FNS USPS-FIM.BUTTONEVENTINFN USPS-FIM.COPYFN USPS-FIM.CREATE USPS-FIM.CREATE.MENU
                  USPS-FIM.DISPLAYFN USPS-FIM.GETFN3 USPS-FIM.IMAGEBOXFN USPS-FIM.INIT USPS-FIM.PUTFN)
             (GLOBALVARS USPS-FIM.IMAGEFNS USPS-FIM.MENU
                  (USPS-FIM.STYLES '((A T T NIL NIL T NIL NIL T T)
                                     (B T NIL T T NIL T T NIL T)
                                     (C T T NIL T NIL T NIL T T)
                                     (D T T T NIL T NIL T T T))))
             (P (USPS-FIM.INIT)))))
```

;; Image Objects and functions for dealing with various kinds of mail.

;; FIMs -- "Facing Identification Marks" used with Business Reply Mail. The top of a FIM must be within 1/8" of the top of the envelope or card, and the
;; right edge of the FIM must be 2" +/- 1/8" from the right edge of the card. You can tilt the FIM no more than 5 degrees from vertical.

```
(DEFINEQ
```

(USPS-FIM.BUTTONEVENTINFN
```
(LAMBDA (IMAGEOBJ WINDOW SELECTION X Y SELWINDOW TEXTSTREAM BUTTON OPERATION)
                                                      ; Edited 13-Feb-89 12:29 by jds
```

;;; the user has pressed a button inside the bitmap object IMAGEOBJ. Bring up a menu of bitmap edit operations.

```
    (PROG* ((FIM-STYLE (IMAGEOBJPROP IMAGEOBJ 'OBJECTDATUM)))
          (COND
             ((OR (EQ BUTTON 'RIGHT)
                  (AND OPERATION (NEQ OPERATION 'NORMAL)))  ;  If he's extending a selection, or is selecting for
                                                            ;  move/copy/delete, DON'T bring up the bitmap editing menu!
              (RETURN)))
          (IMAGEOBJPROP IMAGEOBJ 'OBJECTDATUM (OR (MENU (COND
                                                            ((|type?| MENU USPS-FIM.MENU)
                                                             USPS-FIM.MENU)
                                                            (T (SETQ USPS-FIM.MENU (USPS-FIM.CREATE.MENU)))))
                                                  FIM-STYLE))
          (IMAGEOBJPROP IMAGEOBJ 'CACHED.BITMAP NIL)      ; And clear any cached shrunk bitmaps so the display looks
                                                          ; reasonable.
          (RETURN 'CHANGED))))
```

(USPS-FIM.COPYFN
```
    (LAMBDA (IMAGEOBJ)                                     ; Edited 13-Feb-89 13:03 by jds
```
    ;; makes a copy of a bitmap image object.
```
     (USPS-FIM.CREATE (IMAGEOBJPROP IMAGEOBJ 'OBJECTDATUM))))
```

(USPS-FIM.CREATE
```
    (LAMBDA (FIM-STYLE)                                    ; Edited 13-Feb-89 12:00 by jds
```
    ;; returns an IMAGEOBJ that displays/prints as a Postal Service Facing Identification Mark for business-reply mail.
```
     (IMAGEOBJCREATE FIM-STYLE BITMAPIMAGEFNS)))
```

(USPS-FIM.CREATE.MENU
```
    (LAMBDA NIL                                            ; Edited 13-Feb-89 12:27 by jds
```
    ;; Creates the menu that comes up when you button in a FIM image object.
```
     (|create| MENU
          TITLE _ "New Facing Style"
          ITEMS _ '(A B C D)
          CENTERFLG _ T
          CHANGEOFFSETFLG _ 'Y
          MENUOFFSET _ (|create| POSITION
                              XCOORD _ -1
                              YCOORD _ 0))))
```

(USPS-FIM.DISPLAYFN

```
  (LAMBDA (IMAGEOBJ IMAGE.STREAM)                                           ; Edited 13-Feb-89 12:18 by jds
    ;; Display a bitmap IMAGEOBJ on IMAGE.STREAM.  Scales and rotates it if appropriate, and moves it down by DESCENT.

    (LET* ((FIM-STYLE-LIST (CDR (ASSOC (IMAGEOBJPROP IMAGEOBJ 'OBJECTDATUM)
                                        USPS-FIM.STYLES)))
           (STREAM-SCALE (DSPSCALE NIL IMAGE.STREAM))
           (LINE-PITCH (FIXR (FTIMES STREAM-SCALE 72.27 1/16)))
           (LINE-WIDTH (FIXR (FTIMES STREAM-SCALE 72.27 0.031)))
           (FIM-HEIGHT (FIXR (FTIMES STREAM-SCALE (CONSTANT (TIMES 72.27 5/8))))))
         SHRUNK.BITMAP)
        (RELMOVETO 0 (IMINUS FIM-HEIGHT)
                IMAGE.STREAM)
        (|for| LINE-P |in| FIM-STYLE-LIST |do| (COND
                                               (LINE-P (RELDRAWTO 0 FIM-HEIGHT LINE-WIDTH 'PAINT IMAGE.STREAM)
                                                       (RELMOVETO LINE-PITCH (IMINUS FIM-HEIGHT)
                                                               IMAGE.STREAM))
                                               (T (RELMOVETO LINE-PITCH 0 IMAGE.STREAM)))))))
```

(**USPS-FIM.GETFN3**

```
  (LAMBDA (STREAM)                                                          ; Edited 13-Feb-89 13:49 by jds
```

;;; reads a bitmap image object from a file. This version stores the binary data rather than the character representation used by READBITMAP.

```
    (USPS-FIM.CREATE (SELECTQ (\\BIN STREAM)
                        (0 'A)
                        (1 'B)
                        (2 'C)
                        (3 'D)
                        (HELP "Illegal FIM style")))))
```

(**USPS-FIM.IMAGEBOXFN**

```
  (LAMBDA (IMAGEOBJ IMAGE.STREAM CURRENT.X RIGHT.MARGIN)                    ; Edited 13-Feb-89 12:19 by jds
    ;; returns an imagebox describing the size of the scaled bitmap

    (LET* ((FIM-STYLE (IMAGEOBJPROP IMAGEOBJ 'OBJECTDATUM))
            (SCALE (DSPSCALE NIL IMAGE.STREAM))
           WIDTH HEIGHT)
           (SETQ WIDTH (FIXR (FTIMES SCALE (CONSTANT (FTIMES 72.27 (+ 9/16 0.031))))))
           (SETQ HEIGHT (FIXR (FTIMES SCALE (CONSTANT (TIMES 72.27 5/8)))))
           (|create| IMAGEBOX
                   XSIZE _ WIDTH
                   YSIZE _ HEIGHT
                   YDESC _ HEIGHT
                   XKERN _ 0))))
```

(**USPS-FIM.INIT**

```
  (LAMBDA NIL                                                               ; Edited 13-Feb-89 12:02 by jds
    ;; returns the function vector which gives the functional information for a bitmap image object.

    (SETQ BITMAPIMAGEFNS (IMAGEFNSCREATE (FUNCTION USPS-FIM.DISPLAYFN)
                                         (FUNCTION USPS-FIM.IMAGEBOXFN)
                                         (FUNCTION USPS-FIM.PUTFN)
                                         (FUNCTION USPS-FIM.GETFN3)
                                         (FUNCTION USPS-FIM.COPYFN)
                                         (FUNCTION USPS-FIM.BUTTONEVENTINFN)
                                         (FUNCTION NILL)
                                         (FUNCTION NILL)
                                         (FUNCTION NILL)
                                         (FUNCTION NILL)
                                         (FUNCTION NILL)
                                         (FUNCTION NILL)
                                         (FUNCTION NILL)))))
```

(**USPS-FIM.PUTFN**

```
  (LAMBDA (OBJECT STREAM)                                                   ; Edited 13-Feb-89 12:05 by jds
                                                                            ; Put a description of a FIM object into the file.
    (LET* ((FIM-STYLE (IMAGEOBJPROP OBJECT 'OBJECTDATUM)))
          (\\BOUT STREAM (SELECTQ FIM-STYLE
                           (A 0)
                           (B 1)
                           (C 2)
                           (D 3)
                           (HELP "Invalid FIM Style" FIM-STYLE))))))
)

(DECLARE\: DOEVAL@COMPILE DONTCOPY)

(GLOBALVARS USPS-FIM.IMAGEFNS USPS-FIM.MENU (USPS-FIM.STYLES '((A T T NIL NIL T NIL NIL T T)
                                                              (B T NIL T T NIL T T NIL T)
                                                              (C T T NIL T NIL T NIL T T)
                                                              (D T T T NIL T NIL T T T))))
)
```

(**USPS-FIM.INIT**)

(PUTPROPS **USPS COPYRIGHT** ("Venue & Xerox Corporation" 1989 1990))

FUNCTION INDEX