

## CTSS BULLETIN 72

Identification

Inter-user communication

WRMESS, RDMESS, ALLOW, FORBID

Purpose

To provide the facility for users to communicate with each other directly, several routines have been added to the supervisor which allow the sending and receiving of messages by way of the console input buffers. Privacy screens have been provided which "allow" or "forbid" the sending of messages by specified users.

Method

- 1) Short messages may be sent to another user's console input buffer.
- 2) Selectively, short messages may be received in one's own console input buffer from other users.
- 3) The console input buffer may be read.

Usage

To send a message:

As supervisor entry:

```

TSX   WRMESS,4           (TIA   #HWRMESS)
PZE   #HPROBN
PZE   #HPROGN
PZE   LOC,, 'n'
```

PROBN is the problem number of the receiver.

PROGN is the programmer number of the receiver.

LOC is the beginning location of the message to be sent.

n is the number of words in the message beginning at LOC.

Upon return, if the AC is non-zero, it contains an error code which indicates that the call was unsuccessful. The following error codes have been assigned.

- 1 - The specified receiver is not a current user of CTSS. (i.e. logged in).
- 2 - The receiver's input buffers are full.

3 - The receiver has not given permission for the sender to send messages to his input buffer.

If the AC is zero, the first word of the receiver's input buffer will then contain an octal 77 in character 1, the sender's problem number, right adjusted, blank padded in characters 2-6. The second word will contain the sender's programmer number, right adjusted and blank padded. The n words of the message will begin in the third word. If n is less than 12 the terminal words of the 14 word buffer will be blank padded.

To read a message from the input buffer:

As supervisor entry:

```

                TSX   RDMESS,4           (TIA   =HRDMESS)
                PZE   LOC,, 'n'
ALPHA OPN   EMPTY

```

n words will be moved from the input buffer into locations beginning at LOC.

If the users' input buffer is empty at the time of this call and ALPHA contains a zero, the user is placed in input wait status. If, however, ALPHA does not contain a zero, control returns to ALPHA.

To be selective about who shall send messages to the user:

As supervisor entry:

```

                TSX   ALLOW,4           (TIA   =HALLOW)
                PZE   =HPROBN
                PZE   =HPROGN

```

PROBN is the problem number and PROGN is the programmer number of the programmer who may use WRMESS to send messages to the user's console input buffer. Each call to ALLOW overrides all previous.

If PROGN is zero, all programmers on problem PROBN may send messages.

If PROBN is zero, only programmer PROGN may send messages.

If both PROBN and PROGN are zero, any programmer may send messages.

To lock everyone out:

As supervisor entry:

```

                TSX   FORBID,4         (TIA   =HFORBID)

```

FORBID prevents any programs from sending lines to the user's console input buffer.