DANZIG CA BANKSET  SET BBANK BEFORE
DIRADRES INDEX LOC  LOOK AHEAD TO NEXT WORD TO SEE
NOOP
MIRROR HIGH4  IF ADDRESS GREATER THAN 2K,
EXTEND
ADS ADDRW  DO AUGMENT, IGNORING AND
# LIST. IN MOST CASES THE MODE OF THE RESULT (VECTOR OR SCALAR) OF
# THE LAST ARITHMETIC OPERATION PERFORMED

# IS THE SAME AS THE TYPE OF OPERAND DESIRED (ALL ADD/SUBTRACT ETC.).
EXCEPTIONS TO THIS GENERAL RULE ARE LISTED
# RESULT, VXSC WANTS A SCALAR.
MASK CYR  20, THIS OP REQUIRES SPECIAL ATTENTION.
INDEX A  NO -- THE MODE IS DEFINITE. PICK UP THE
TCF UNAJUMP  1-4 OF A (ZERO, EXIT, HAS BEEN
TCF DAD  34 -- DP ADD.
TCF LXA  02 -- LOAD INDEX FROM ERASABLE.

# THE FOLLOWING JUMP TABLE APPLIES TO UNARY INSTRUCTIONS
MASK LOW8
# SSP (STORE SINGLE PRECISION) IS EXECUTED HERE.
SSP INCR LOC  PICK UP THE WORD FOLLOWING THE GIVEN
EBANK= 1400  SO YUL DOESN'T CUSS THE "CA 1400"
READ LCHAN  DCA 0 OR DCS 0
DAD EXTEND
SETOVF TC OVERFLOW

OVERFLWZ TS L  ENTRY FOR THIRD COMPONENT.
OVERFLWY TS L  ENTRY FOR SECOND COMPONENT.
OVERFLOW INDEX A  ENTRY FOR 1ST COMP OR DP (L=0).
TC Q  NO OVERFLOW EXIT.
TCF NEWMODE
# THE FOLLOWING IS THE PROLOGUE TO V/SC. IF THE PRESENT MODE IS
VECTOR, IT SAVES THE SCALAR AT X IN BUF
SHORTT CAF SIX  SCALAR SHORT SHIFTS COME HERE.
TSSR INDEX SR * GET SHIFTING BIT.
CCS CYR * SEE IF A ROUND IS DESIRED.
RIGHTR TC MPACSRND * YES -- SHIFT RIGHT AND ROUND.
TS MPAC +2 * AND ROUND.)

* ROUTINE FOR SHORT SCALAR SHIFT LEFT (AND MAYBE ROUND).
CA MPTEMP * SEE IF SHIFT COUNT LESS THAN 14D.
BZMF VSSR * IF SO, BRANCH AND SHIFT IMMEDIATELY.
TC SETROUND * X COMPONENT NOW SHIFTED, SO MAKE UP

SMPAC+ AD -1/2+2 * SEE IF ARGUMENT GREATER
DXCH MPAC * WE WILL TAKE THE SQUARE ROOT OF
ARGHI CAF SLOPEHI * ARGUMENT BETWEEN .25 AND .5, GET
AD BIAISHI * X0/2 = (MPAC/2)(SLOPHI) + BIAISHI/2.
ARGLO CAF SLOPELO * (NORMALIZED) ARGUMENT
AD BIASLO
EXTEND * IF SO, WE LOST (OR GAINED) PI, SO
DOUBLE * MAGNITUDE. IF SO, REDUCE IT TO

DOUBLE
TCF ACOSST * START IMMEDIATELY IF POSITIVE.
ACOSST CS HALF * TEST MAGNITUDE OF INPUT.
TCF ACOSOVF * THIS IS PROBABLY AN OVERFLOW
TC ESCAPE
CCS MPTEMP * SEE IF UN-NORMALIZATION
CAF LBUF2 * DO FINAL MULTIPLY AND GO TO ANY
LDANZIG TCF DANZIG

ACOSOVF EXTEND * IF MAJOR PART WAS ONLY 1
ACOSABRT TC ALARM * IF OVERFLOW, CALL ANSWER ZERO
INDEX FIXLOC * SLOW IN THIS CASE, BUT SAVES
* THE ADDRESS ITSELF IS MADE UP BY THE YUL SYSTEM ASSEMBLER
EXTEND * DISPATCH SWITCH BIT OPERATION
TS STATE * NEW SWITCH WORD.
MP POLISH * CODE.
+13D TCF DANZIG * 11 -- NOOP.