APPENDIX K: SAMPLE SOURCE CODE: QA9 PROCEDURE QTSYNOPS CMS-2 AND TRANSLATOR PRODUCED ADA

This appendix contains source code for QTSYNOPS, one of the QA9 procedures translated during Quick Look. The source code included is for CMS-2 QTSYNOPS and the Ada QTSYNOPS produced by the three translators. The source code is included so that the reader can see how the CMS-2 code translate. All of QA9 at various stages of the translation process is being made available on the Web.

CMS-2 QTSYNOPS

```
CQT 0546 (EXTDEF) PROCEDURE QTSYNOPS $
CQT 0547 COMMENT
                     PUT QA NUMBER IN HEADER $
                    SET CHAR(28,4) (VHSYNHED) TO VMTESTNO $
CQT 0548
                   QTHEAD INPUT VHSYNHED $
CQT 0549
CQT 0550 IF VINOTSTS LT 1 THEN RETURN$
CQT 0551 SET VHTEMP TO H() ''TOP OF FORM CONTROL VRBL'' $
CQT 0552 LOOP. VARY VSX2 THRU 4 $
CQT 0553 QTSYV1. VARY VX1 THRU (VINOTSTS-1) $
CQT 0554 QTSYW4. SET VX2 TO TAQR(VX1,ERRORNO) $
CQT 0555 QTSYN1. IF VX2 EQ 0 THEN RESUME QTSYV1 $
CQT 0556 COMMENT IF THE CODE IS 0 THEN NO TST IS EXPECTED.BYPASS MESSAGE $
CQT 0557
                   SET VIH1L TO VX1 $
CQT 0558 COMMENT SAVE LOOP INDEX$
          SET VX1 TO VSX1*5+VX1 ''COMPUTE TEST NO. FROM LOOP
CQT 0559
INDEX''$
                   IF VSX2 NOT 0 THEN GOTO FAIL $
CQT 0560
                    IF VITESTYP EQ 0 THEN GOTO FAIL $
COT 0561
CQT 0562 COMMENT ''MUST BE QA SO NO LIST OF TESTS PASSED NEEDED'' $
CQT 0563 IF VPASS THEN GOTO PASS$
CQT 0564 comment OUTPUT PRINT (VHASTER, VHFOLLOW, VHPASS, VHASTER) FHEDSYN $
CQT 0565
                   SET VPASS TO 1 $
                    IF VX2 NOT 6 THEN GOTO FAIL $
CQT 0566 PASS.
CQT 0567
                   SET VIX3 TO (VX1+1) + 1000*(VITESTNO-10) $
CQT 0568 comment OUTPUT PRINT VIX3 FPASS $
CQT 0569 COMMENT PRINTS A LIST OF TESTS THAT PASSED $
CQT 0570
                    GOTO LOOPRES1$
CQT 0571 FAIL. IF VSX2 NOT 1 THEN GOTO NOTEXEC $
COT 0572 IF VX2 EO 7 THEN GOTO EXECHED ''P
                    IF VX2 EQ 7 THEN GOTO EXECHED ''PRINT OUT HEADER IF FIRST
CQT 0572
                              FAILURE IS A GENERATION ERROR '' $
CQT 0573
                    IF VX2 GT 5 AND VX2 LT 9D THEN QTCONSW USING VX2 THEN
CQT 0574
                    ''RECORDS TESTS EXECUTED''
COT 0575
CQT 0576
                   GOTO LOOPRES1 $
                    IF VX2 GT 5D THEN GOTO NOTEXEC $
CQT 0577
CQT 0578 EXECHED. IF VEXEC THEN GOTO EXEC1 ''SKIP HEADER'' $
                    IF VITESTYP EQ 1 ''QR TEST'' THEN SET VHTEMP TO H(1) $
CQT 0579
CQT 0580 comment OUTPUT PRINT VHTEMP ''TOP OF FORM IF THIS IS A QR TEST'' $
CQT 0581 comment OUTPUT PRINT (VHASTER, VHFOLLOW, VHFAIL, VHASTER)
CQT 0582
                     FHEDSYN $
```

```
CQT 0583 comment OUTPUT PRINT H(0) $
 COT 0584
                    SET VEXEC TO 1 $
 CQT 0585 EXEC1.
                  QTCONSW USING VX2 ''PRINT OUT
 COT 0586
                                      EXECUTION ERROR'' $
 CQT 0587
                    GOTO LOOPRES1 $
 CQT 0588 NOTEXEC. IF VSX2 NOT 2 THEN GOTO NOTSKIP $
CQT 0589
                   IF VITESTYP EQ 0 THEN GOTO QTSYN2
CQT 0590
                   ''MUST BE QA TEST SO NO LIST OF SKIPPED TESTS NEEDED'' $
CQT 0591
                    IF VX2 NOT 30D THEN GOTO NOTSKIP $
CQT 0592
                    IF VSKIP THEN GOTO SKIP $
CQT 0593 comment OUTPUT PRINT (VHASTER1, VHFOLLOW, VHSKIP, VHASTER) FHEDSYN$
CQT 0594 comment OUTPUT PRINT H(0) $
CQT 0595
                   SET VSKIP TO 1 $
CQT 0596 SKIP.
                   SET VAX1 TO VITESTNO-10 $
CQT 0597
                    SET VIX3 TO (VX1+1)+1000D*VAX1 $
CQT 0598 comment OUTPUT PRINT VIX3 FPASS $
CQT 0599 COMMENT PRINTS A LIST OF TESTS THAT WERE SKIPPED (CODE 30) $
CQT 0600
                    GOTO LOOPRES1$
CQT 0601 NOTSKIP. IF VSX2 NOT 3 THEN GOTO NOTVIS $
CQT 0602
                   IF VX2 GT 13D THEN GOTO NOTVIS $
CQT 0603
                    IF VX2 LT 9D THEN GOTO LOOPRES $
CQT 0604
                    IF VITESTYP EQ O THEN GOTO QTSYN2
CQT 0605
                    ''THIS MUST BE A QA TEST SO NO VISUALS'' $
CQT 0606
                    IF VVIS THEN GOTO VISUAL $
CQT 0607 comment OUTPUT PRINT (VHASTER1, VHFOLLOW, VHVISUAL, VHASTER)
CQT 0608
                    FHEDSYN $
CQT 0609 comment OUTPUT PRINT H(0) $
COT 0610
                    SET VVIS TO 1 $
CQT 0611 VISUAL.
                    QTERRD ''VISUAL TESTS PRINT OUT '' $
CQT 0612
                    GOTO LOOPRES1 $
CQT 0613 NOTVIS. IF VSX2 NOT 4 OR VX2 LT 6 OR (VX2
CQT 0614 GT 8D AND VX2 LT 14D) OR VX2 EQ 30D THEN GOTO LOOPRES $
CQT 0615
                    IF VITESTYP EQ 0 THEN GOTO QTSYN2
CQT 0616
                    ''THIS MUST BE A QA TEST SO NO SPECIALS'' $
CQT 0617
                    IF VSPEC THEN GOTO SPEC1 $
CQT 0618 comment OUTPUT PRINT (VHASTER1, VHFOLLOW, VHSPEC, VHASTER)
CQT 0619
                    FHEDSYN $
CQT 0620 comment OUTPUT PRINT H(0) $
CQT 0621
                   SET VSPEC TO 1 $
CQT 0622 SPEC1.
                   QTERRE ''ERROR CODES 14-29'' $
CQT 0623 COMMENT ((LINE* $
CQT 0624 LOOPRES1. SET TAQRTYP(VX2, TERRORCT) TO TAQRTYP(VX2, TERRORCT) +1$
CQT 0625 LOOPRES. SET VX1 TO VIHIL $
CQT 0626 END QTSYV1 $
CQT 0627
                   END LOOP $
CQT 0628 COMMENT PRINT OUT HEADER AND ALL TOTALS $
CQT 0629 QTSYN2.
                   QTMESSW USING 4$
CQT 0630 COMMENT
                   PRINT OUT NUMBER OF STUBBED TESTS $
COT 0631
                   IF STUBENT NOT O THEN BEGIN $
CQT 0632 comment OUTPUT PRINT STUBENT FORMSTUB $
CQT 0633
                   END $
CQT 0634
                   SET VEXEC, VVIS, VSPEC, VPASS, VSKIP TO 0 ''RESET FLAGS'' $
CQT 0635 comment OUTPUT PRINT H(A) ''CLEAR MAJOR HEADER AND TOP OF FORM''$
CQT 0636 RETURN $
```