```
P2749  NAME        S40.9 - VTOGAIN (AIMPOINT MANEUVERS ONLY)
R2750  FUNCTION    (1) GENERATES REQUIRED VELOCITY AND VELOCITY-TO-BE-GAINED
R2751              VECTORS FOR USE DURING AIMPOINT MANEUVERS
R2752              (2) UPDATES THE B VECTOR WHICH IS USED IN THE FINAL
R2753              CALCULATION OF EXTRAPOLATING THE VELOCITY-TO-BE-GAINED
R2754  CALLING SEQ VIA FINDVAC AS NEW JOB.
R2755  INPUT       RNIT     - ACTIVE VEHICLE RADIUS VECTOR IN METERS AT +29.
R2756              VNIT     - ACTIVE VEHICLE VELOCITY VECTOR IN METERS/CS AT +7
R2757              VRPREV   - LAST COMPUTED VELOCITY REQUIRED VECTOR IN
R2758                         METERS/CS AT +7.
R2759              NOMTIG     - TIME OF IGN. USED IN TARGETTING ROUTINESΣ+28ß
R2760              DELLT4     - TRANSFER TIME FROM PIPTIME TO TARGETΣ+28ß
R2761              TNIT       - TIME OF RNIT AND VNIT IN CS AT +28
R2762              GDT/2    - HALF OF VELOCITY GAINED IN DELTA T TIME DUE TO
R2763                         ACCERERATION OF GRAVITY IN METERS/CS AT +7.
R2764              DELVREF  - CHANGE IN VELOCITY DURING LAST 2 SEC IN
R2765                         METERS/CS AT +7.
R2766           NORMSW   SET=CENTRAL ANGLE BETWEEN RTARG AND RTIG IS BETWEEN
R2767                    165 TO 195 DEGREES
R2768                    RESET=CENTRAL ANGLE OUTSIDE CONE DESCRIBED ABOVE
R2769  OUTPUT      VGTEMP   - VELOCITY TO BE GAINED VECTOR IN METERS/CS AT +7.
R2770              COGA       - INPUT OF INITIAL GUESS FOR LAMBERT FROM S40.1 O
R2771                         OR PREVIOUS PASS THRU S40.9
R2772              GOBL/2     -OBLATENESS TERM IN AVG GRAV CALC-GOBL*RSQ/MU
R2773              VRPREV   - VELOCITY REQUIRED VECTOR IN METERS/CS AT +7.
R2774              BDT      - B VECTOR IN METERS/CS AT +7.
R2775  SUBROUTINES USED  -  INITVEL
 2776  REF   3  LAST  675   16,2000                        SETLOC P40S1
 2777                       16,2257                        BANK

 2778  REF   7  LAST  657   E6,1746                        EBANK= NBRCYCLS
 2779  REF   1                                            COUNT  16/S40.9

 2780  REF 150  LAST  678   16,2257  0 6006 1  S40.9      TC     INTPRET
 2781                       16,2260   71201 1              SETPD  DLOAD
 2782                       16,2261   00001 0                     00D
 2783  REF   2  LAST  666   16,2262   11456 0                     LO6ZEROS
 2784                       16,2263   77725 1              PDDL
 2785  REF   1              16,2264   34401 0                     EP4(45)L
 2786                       16,2265   71214 0              BON    DLOAD
 2787  REF   5  LAST  668   16,2266   03705 0                     NORMSW
 2788                       16,2267   34271 1                     +2
 2789  REF   1              16,2270   34403 1                     EP4(10)L
 2790                       16,2271   77606 1              PUSH
 2793                       16,2272   45014 0              CLEAR  CALL
 2794  REF   3  LAST  481   16,2273   00675 0                     GUESSW
 2795  REF   1              16,2274   22002 0                     HAVEGUES
 27951                      16,2275   77776 1              EXIT
 27952 REF  59  LAST  675   16,2276  0 5301 0              TC     PHASCHNG      SAVE TIME BY NOT REDOING LAMBERT CALCS
 27953                      16,2277   05021 1              OCT    05021         C, PRIORITY NEXT, JOB BELOW
```