COMPASS SWING FLOWCHART

START
SET AIRCRAFT ON MAGNETIC N,E,S,W, AND RECORD

YES

IS COMPASS WITHIN 2° OF PREVIOUS DD 1613 CARD ON ALL HEADINGS?

NO →

COMPARE TO MAGNETIC HEADING AND COMPUTE DEVIATION

→ COMPUTE COEFF A N,E,S,W

→ IS COEFF A 2° OR LESS + OR - ?

NO

ADJUST COMPASS FRAME AND RE-SWING COMPASS

YES

COMPUTE COEFF B & C

SET AIRCRAFT ON MAGNETIC NORTH AND ADJUST TO COMPENSATED HEADING USING COEFF C

SET AIRCRAFT ON MAGNETIC EAST AND ADJUST TO COMPENSATED HEADING USING COEFF B

RECOMPUTE DEVIATION FOR N,E,S,W, AND ENTER NEW HEADINGS IN COLUMN (4) OF RESIDUAL SWING SECTION

IS THE SPREAD FROM MOST POSITIVE TO MOST NEGATIVE GREATER THAN 5°?

NO →

SET AIRCRAFT ON EVERY 45° INTERMEDIATE HEADING AND RECORD COMPASS READING.
(i.e. 45, 135, 225, 315)

YES

COMPARE ALL HEADINGS TO TRUE HEADINGS

COMPUTE THE DEVIATIONS FOR ALL EIGHT HEADINGS AND RECORD

ADD ALL EIGHT HEADINGS. IS THE TOTAL GREATER THAN + OR - 8°?

YES

NO

ENTER READINGS ON SMALL PORTION OF DD 1613 CARD. TEAR OFF AND PLACE IN AIRCRAFT NEAR COMPASS. PLACE LARGE PORTION OF CARD IN AIRCRAFT HISTORICAL RECORDS. MAKE APPROPRIATE ENTRIES IN LOGBOOK.

REPLACE THE COMPASS!

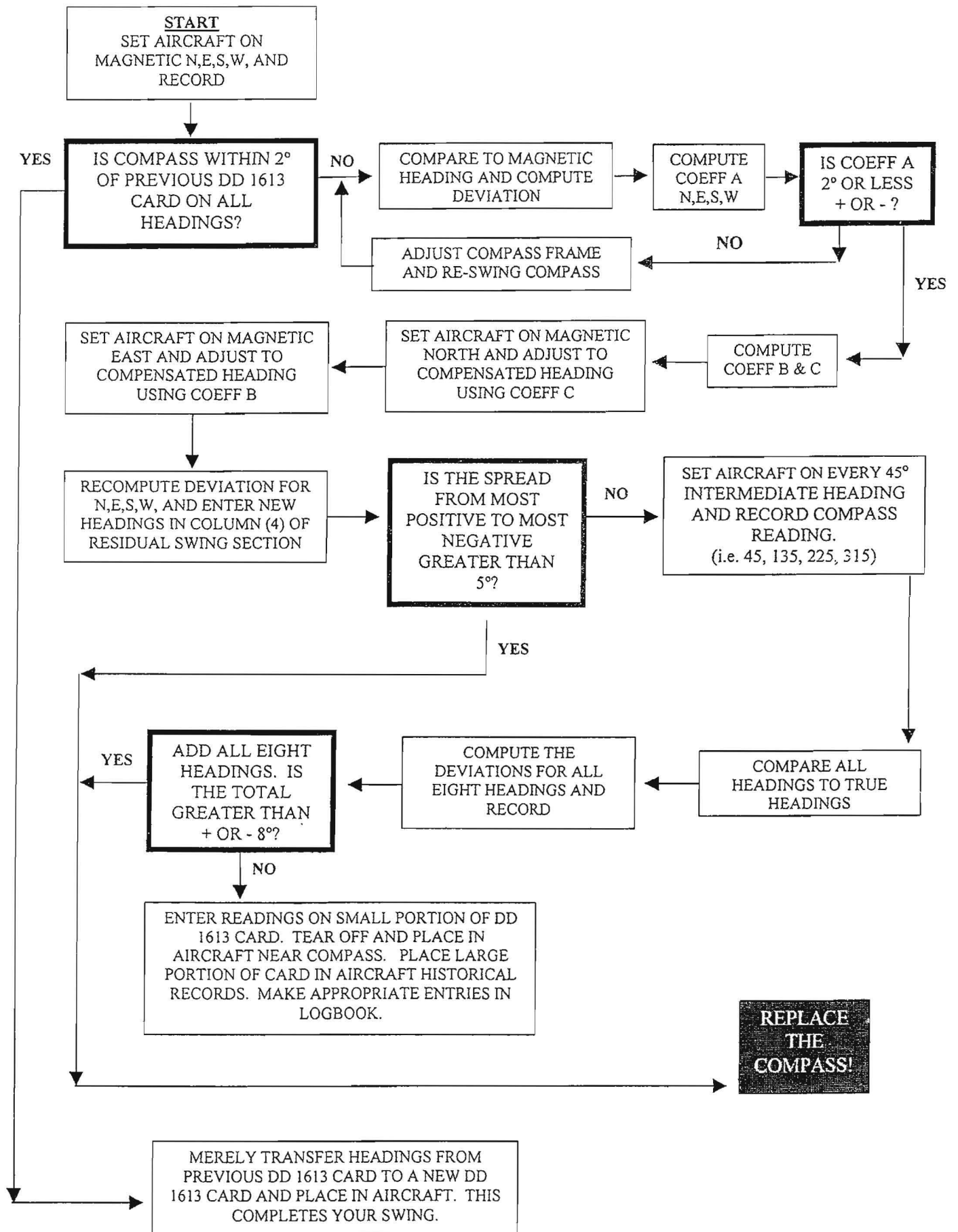MERELY TRANSFER HEADINGS FROM PREVIOUS DD 1613 CARD TO A NEW DD 1613 CARD AND PLACE IN AIRCRAFT. THIS COMPLETES YOUR SWING.

NOTE: Deviation = Compass Heading minus Magnetic Heading [D = (CH - MH)].