Let $S = \{a, b, c, d\}$ be a sample space for an experiment. Let E be the event that a is not observed and F be the event that d is not observed. What is the event that either E occurs but F does not occur, or else F occurs but E does not occur?

(a) $\{a, d\}$

(b) $\{a, b, c, d\}$

(c) $\{b, c\}$

(d) $\{a, b, c\}$

(e) $\{b, c, d\}$

(f) $\{a, c, d\}$

(g) $\{a\}$

(h) $\{d\}$

(i) $\emptyset$

(j) None of these