Suppose an experiment has sample space $S = \{a, b, c, d, e, f, g\}$ with equiprobable outcomes. Define the following three events:

$$R = \{a, b, c, d\}$$
$$W = \{b, d, e\}$$
$$T = \{a, e\}.$$

Which of the following events is independent of the event $R^c W^c T^c$?

(a) None of these

(b) R

(c) W

(d) T

(e) $R \cup W$

(f) $R \cup W \cup T$

(g) $W \cup T$

(h) $R \cup T$

(i) RW^c

(j) TW^c