Abstract. In this paper we study operators of the form $M(\phi) = T(\phi) + H(\phi)$ where $T(\phi)$ and $H(\phi)$ are the Toeplitz and Hankel operators acting on $\ell_2$. We investigate the connection between Fredholmness and invertibility of $M(\phi)$ for functions $\phi \in L^1(T)$. Using this relationship we establish necessary and sufficient conditions for the invertibility of $M(\phi)$ with piecewise continuous $\phi$. Finally, we consider several stability problems related to $M(\phi)$, in particular the stability of the finite section method.