Several new electronic transitions of NiF with red-degraded bandheads near 12896 and 13497 cm$^{-1}$ were recorded and analyzed. All bands have a common lower level: namely, $v=0$ of the $A^2\Delta_{5/2}$ state. The observed $^{58}$NiF and $^{60}$NiF isotopologue splitting in each band suggests tentative assignments as the (3,0) and (2,0) vibrational bands of the [12.6]$\Omega=5/2 - A^2\Delta_{5/2}$ transition and the (2,0) band of a new [13.1]$\Omega=5/2 - A^2\Delta_{5/2}$ transition of NiF. Results of the analysis will be presented. The gas phase NiF molecules were produced using a nickel-lined hollow cathode in an argon-based electric discharge with a small amount of SF$_6$. 