Previous semi-empirical calculations on $^2T_2$ states of XY$^+_4$ cations resulted in spin-orbit splittings an order of magnitude larger than the experimental splittings. Our large mrci calculations on the purely electronic spin-orbit interaction in the Č $^2T_2$ state of CF$^+_4$, using the full Breit-Pauli approximation for the spin-orbit interaction, give the same result as Dixon and Tuckett, almost independent of the geometry. We calculated the coupled 9-dimensional potential surface for the components of the Č $^2T_2$ state of CF$^+_4$ and the vibronic wave functions. The spin-orbit splitting between the vibronic wave functions is much smaller than between the purely electronic wave functions and much closer to the experimental value. The vibronic reduction of the spin-orbit interaction is caused by the Jahn-Teller distortions in the potential surface (Dynamical Jahn-Teller effect). This reduction is also known as the Ham effect. All asymmetric vibrational modes contribute significantly. The Jahn-Teller-effect can not be measured directly. Comparing experimental and calculated spin-orbit splitting is therefore a useful test on the accuracy of calculated Jahn-Teller distortions.