Using ideal and resistive MHD simulations, we investigate the transport of entropy-depleted magnetic flux ropes from the tail to the inner magnetosphere. Resistive MHD simulations of reconnection in the tail demonstrate that plasmoid severance causes spatially and temporally variable entropy loss. The subsequent transport to the inner tail is simulated both by ideal and resistive MHD. The entropy loss is an important factor in enabling deep penetration and providing cross-tail structure. At the boundary to the inner magnetosphere the fast flows are stopped, diverted, and partially reflected, causing pulsations and vorticity consistent with observations.