Structure constants of the Lie Algebra:

Symplectic form

$$\omega = 1 \cdot e^{12} + 1 \cdot e^{34} + 1 \cdot e^{56} +$$

Derivatives

$$d(e^{234}) = e^{1235}$$

$$d(e^{246}) = (-1)e^{1234} + e^{1256}$$

$$d(e^{256}) = (-1)e^{1235}$$

$$d(e^{346}) = e^{1356}$$

$$d(e^{456}) = e^{1345}$$

$$d(e^{24}) = e^{125}$$

$$d(e^{26}) = e^{123}$$

$$d(e^{34}) = e^{135}$$

$$d(e^{46}) = (-1)e^{134} + e^{156}$$

$$d(e^{56}) = (-1)e^{135}$$

$$d\Lambda d(e^{246}) = 2e^{135}$$