CLAIMS

1. A storage unit for an Unmanned Aerial Vehicle (UAV), the storage unit comprising

a container for enclosing the UAV,

a storage unit electrical power source,

a tethering assembly that comprises

- a spool with a spool rotational sensor for providing a rotational data of the spool,
- a spool motor for selectively rotating the spool,
- an electrical utility cable for winding and unwinding around the spool, the electrical utility cable comprising a power supply electrical wire for transferring electrical energy from the storage unit electrical power source to an electrical power source of the UAV, and
- a cable force sensor providing a measurement of a force being exerted by the electrical utility cable onto the UAV, and

a controller being adapted for energizing the spool motor for rotating the spool according to the force measurement and to the spool rotational data,

wherein

the electrical utility cable further comprises a sensor electrical wire for transferring the force measurement from the cable force sensor to the controller.

2. A storage unit for an Unmanned Aerial Vehicle (UAV), the storage unit comprising

a container for enclosing the UAV,

a storage unit electrical power source,

a tethering assembly that comprises

- a spool with a spool rotational sensor for providing a rotational data of the spool,
- a spool motor for selectively rotating the spool,
- an electrical utility cable for winding and unwinding around the spool, the electrical utility cable comprising a power supply electrical wire for transferring electrical energy from the storage unit electrical power source to an electrical power source of the UAV, and
- a cable force sensor providing a measurement of a force being exerted by the electrical utility cable onto the UAV, and

a controller being adapted for energizing the spool motor for rotating the spool according to the force measurement and to the spool rotational data,

wherein

the cable force sensor comprises a wireless transmitter for sending the force measurement wirelessly to the controller.

3. A storage unit for an Unmanned Aerial Vehicle (UAV), the storage unit comprising

a container for enclosing the UAV,

a storage unit electrical power source,

a tethering assembly that comprises

- a spool with a spool rotational sensor for providing a rotational data of the spool,
- a spool motor for selectively rotating the spool,
- an electrical utility cable for winding and unwinding around the spool, the electrical utility cable comprising a power supply electrical wire for transferring electrical energy from

the storage unit electrical power source to an electrical power source of the UAV, and

- a cable force sensor providing a measurement of a force being exerted by the electrical utility cable onto the UAV, and

a controller being adapted for energizing the spool motor for rotating the spool according to the force measurement and to the spool rotational data,

wherein

the tethering assembly further comprises

a bracket for supporting the spool and the electrical utility cable that is wound around the spool,

wherein

the tethering assembly further comprises

at least one bracket force sensor for providing a measurement of a force being exerted by the bracket onto the support area, and wherein

the controller is adapted for energizing the spool motor for rotating the spool according to said measurement from the bracket force sensor.