



# ALASKA SEARCH and RESCUE ASSOCIATION

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## ASARA CMC ENFORCER LOAD CELL KITS

**Overview:** There are two CMC Enforcer Load Cell Kits owned by ASARA: one located in Anchorage and one located in Girdwood. These kits can be utilized by any ASARA team. For information on the Enforcer go to the CMC website @ <http://www.cmcrescue.com/equipment/enforcer/>

**CMC Enforcer Load Cell Kit:** The Enforcer load cell can be used to measure force on a rope rescue system during training, missions or testing. It has two measuring modes, slow and fast. In slow mode it can measure force on an anchor system, high line, deflection line or slow pull test. In fast mode it can measure peak force in drop testing either at the load or the anchor. The Enforcer has Bluetooth connectivity and with the Enforcer App for IOS devices it is possible to graph forces and share them via email. The load cell can measure forces up to 20 kN.

### Use and Care:

**Maintenance** – Clean and dry after each use to remove dust, debris and moisture. During use, carrying and storage, keep the Enforcer away from acids, alkalis, and strong chemicals. Do not expose to flame or high temperatures. Store in a cool, dry location. Do not store where it may be exposed to moist air, particularly where dissimilar metals are stored together. Remove the batteries after each use.

**Repair** – Shall be performed by the manufacturer. All other work or modifications may void the warranty and releases CMC Rescue from all liability and responsibility as the manufacturer.

**Inspection** – Inspect the Enforcer before and after each use. Look for cracks, dents, elongation of the swivels, corrosion or excessive wear. Verify that the swivels rotate freely and that the axle bolts have not loosened. If any significant damage is observed, the device should be removed from service. Minor nicks or sharp spots may be smoothed with emery paper. Moisture, ice, salt, sand, snow, chemicals and other factors can prevent proper operation or can greatly accelerate wear and damage the electronics. If the Enforcer is dropped or impact loaded it should be thoroughly inspected before being returned to service. In most cases a visual inspection will not be able to determine if it has been damaged. Based on the history of the incident, if there is any doubt regarding the safety of the Enforcer, it should be removed from service and retired. Occasionally apply a known force to verify Enforcer accuracy.

Use – To measure the force applied to a rope system at a given point, connect the Enforcer between two components of the system. Ensure it is free to align with the load and does not bind or lever against connectors or terrain/obstructions. The Enforcer is rated to 50 kN but the electronics may be damaged at loads over 20 kN at which time the display will permanently indicate OVERLOADED. In this case the Enforcer should not be used in life safety applications. It is recommended that a Working Load Limit (WLL) be established depending upon use. Using the IOS device app for the Enforcer allows the setting of a warning alarm to be set at loads less than 20 kN. Refer to the Quick Reference Guide provided for instructions on how to operate each of the Enforcer functions including Bluetooth connectivity to a mobile device.

Structural components of the Enforcer are very rugged and the electronics are durable, but it can be damaged by dropping. The electronics are resistant to light moisture but not waterproof. The Enforcer should be protected from rain or other direct water exposure. If it must be used in such conditions wrap it in clear plastic, making sure it dries out completely afterwards. If you use the Enforcer in drop or strength testing, protect it from impact if breakage occurs. It is recommended to wrap the Enforcer in a roll of foam inside of a large PVC/ABS cylinder and position it in the system so as to minimize the chance of impact.

**Enforcer Load Cell Kit, Anchorage:** To access the kit or if there are any questions concerning the Enforcer, contact Mark Miraglia, AMRG, at 907 244-0682 or [mark\\_miraglia@hotmail.com](mailto:mark_miraglia@hotmail.com).

**Enforcer Load Cell Kit, Girdwood:** To access the kit contact Ben Habecker, ASP, at 907 229-3268 or [bhabecker@alyeskaresort.com](mailto:bhabecker@alyeskaresort.com).

When requesting use of the load cell, shipping and insurance costs are the responsibility of the requesting agency. They will provide a brief description of their intended use and expected return to the stored location.