



# SRT Aerial Rescue

Stationary Rope Technique

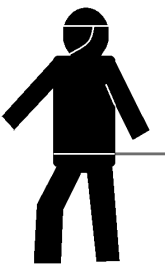
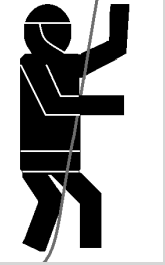
**Presented by :**

**Ed Carpenter President / Lead Instructor**

**Dwayne Neustater President / Lead Instructor**

# Categories of Fall Protection

Fall Protection Information Chart

| Fall Arrest (Dorsal)                                                                                                                                                                                                                                                              | Fall Arrest (Sternal)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>A device specifically designed to arrest a user's fall from an elevated position.</p> <p>Fall arrest devices are designed to minimize the impact forces during a fall.</p>                   |  <p>A device specifically designed to arrest a user's fall from an elevated position.</p> <p>Fall arrest devices are designed to minimize the impact forces during a fall.</p>                                                                                                                                                                                                                                                                  |
| Fall Restrict                                                                                                                                                                                                                                                                     | Fall Restrict (Ladder)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|  <p>Equipment designed to prevent the worker from entering an area where a free could occur.</p>                                                                                                |  <p>Equipment designed to prevent the worker from entering an area where a free could occur while climbing a ladder or ladder system.</p> <p>Typically consists of a rope or cable grab device as well a short tether for that device.</p>                                                                                                                                                                                                     |
| Suspension                                                                                                                                                                                                                                                                        | Rope Access                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|  <p>Equipment designed to suspend or lower a person to a work site. Not intended to arrest a fall unless also equipped for fall arrest.</p>                                                    |  <p>A Rope Access system consists of</p> <ul style="list-style-type: none"> <li>- 2 separate anchor systems</li> <li>- Positioning and progression equipment</li> <li>- Rope clamps, descenders, etc. that allow upwards and downwards movement, as well as positioning at the work area.</li> <li>- A fall arrest system made up of a safety rope and a mobile fall arrest device that accompanies the worker as they move about.</li> </ul> |
| Work Positioning                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|  <p>Equipment designed to position the user at an elevated work site in order that he may have free use of both hands. Not intended to arrest a fall unless also equipped for fall arrest.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                              |

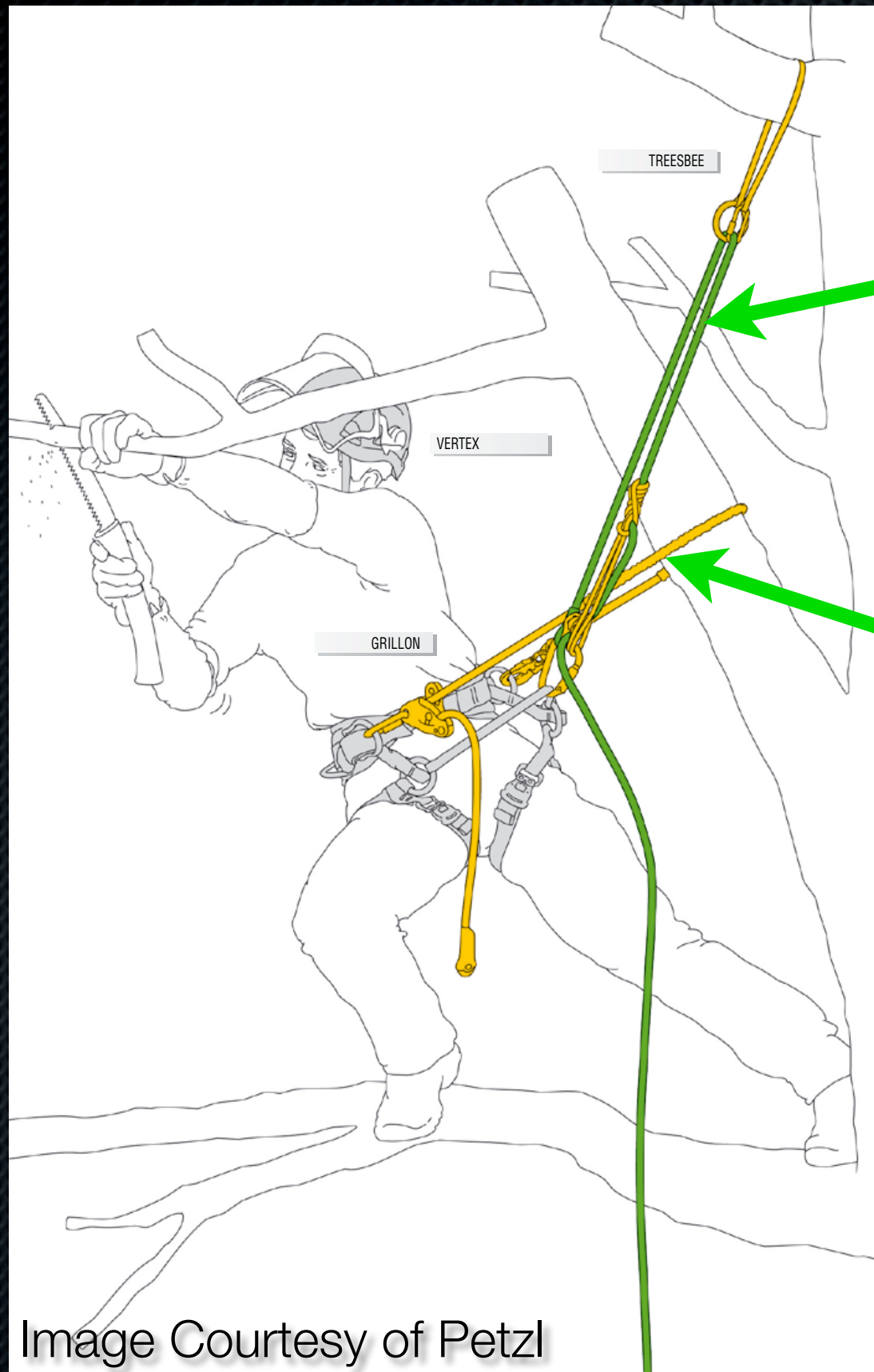
*Fall Protection is a Plan Safety is a Commitment*

Arborists Fall Under the Category of :

**Work Positioning and Suspension** While Climbing

**Fall Arrest (Dorsal)** While working in an Aerial Lift / Man Lift

# Arborist Doubled Rope Climbing System (DdRT)



Suspension System

Work Positioning System

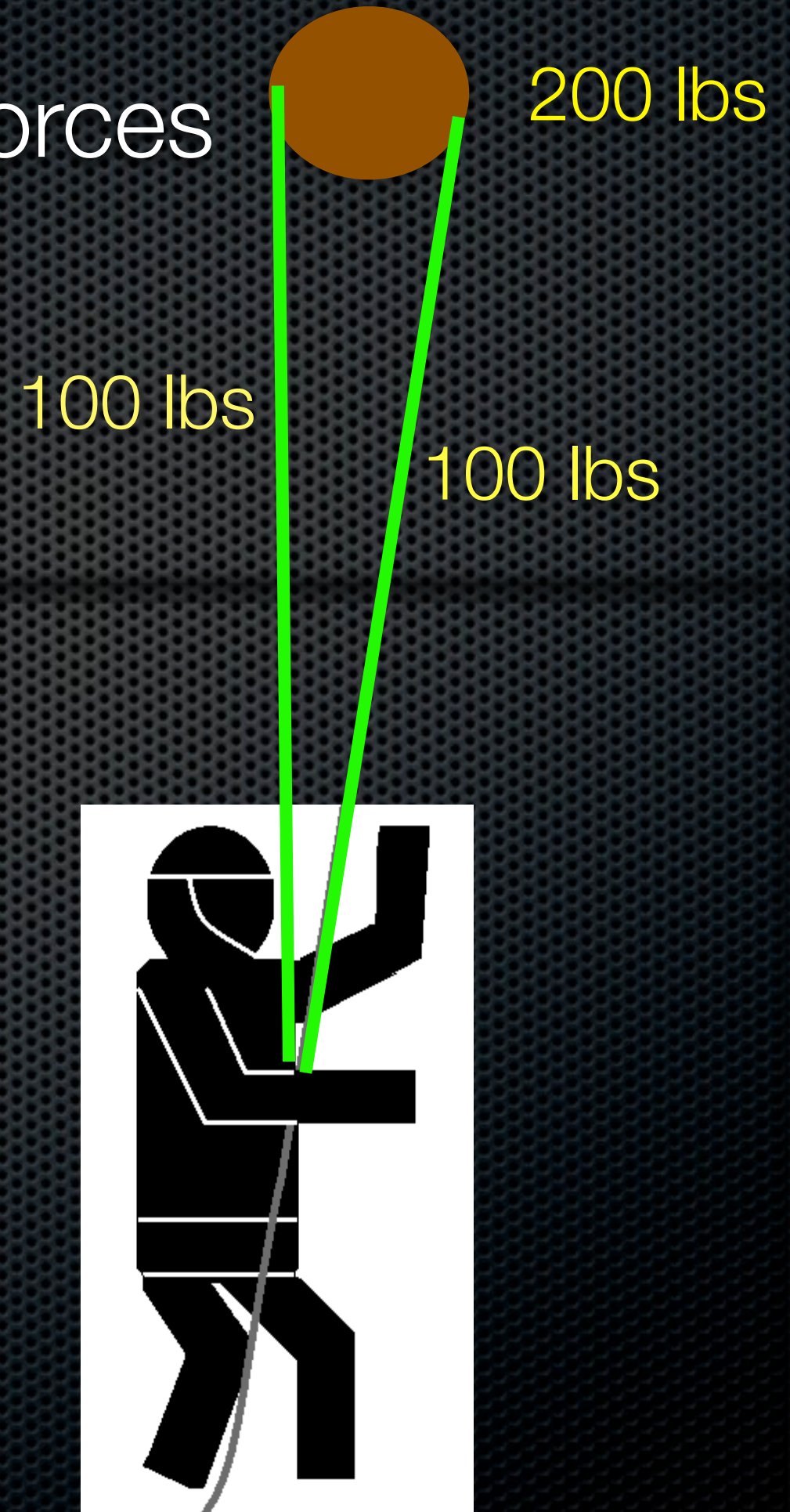


Image Courtesy of Petzl

# Doubled Rope (DdRT) Arborist Climbing System Forces

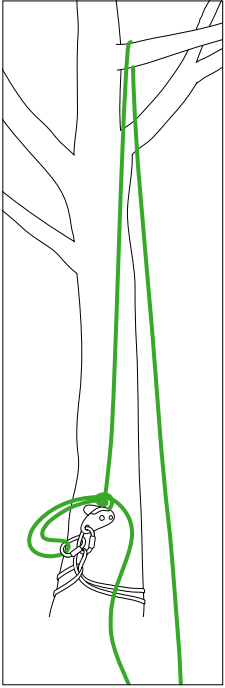
## Arborist Doubled Rope Climbing System

Provides a 2:1  
mechanical advantage  
while ascending and  
descending

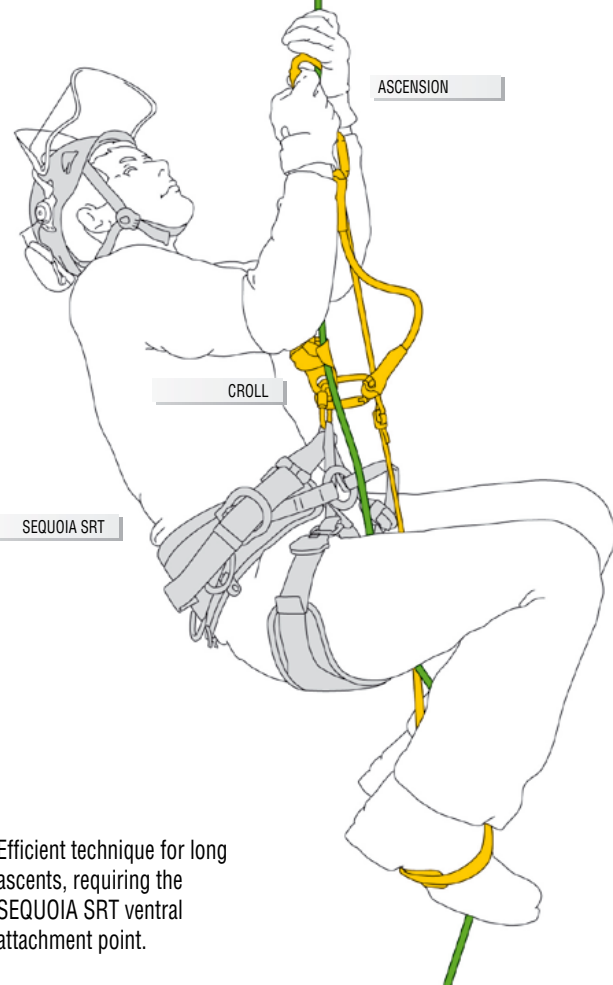


# Arborist DdRT Climbing System





Installing the rope: system is releasable from the ground in case of a problem during the ascent (e.g. attack by hornets...). Quick and easy installation.



Efficient technique for long ascents, requiring the SEQUOIA SRT ventral attachment point.

# Arborist Stationary Rope Technique (SRT)

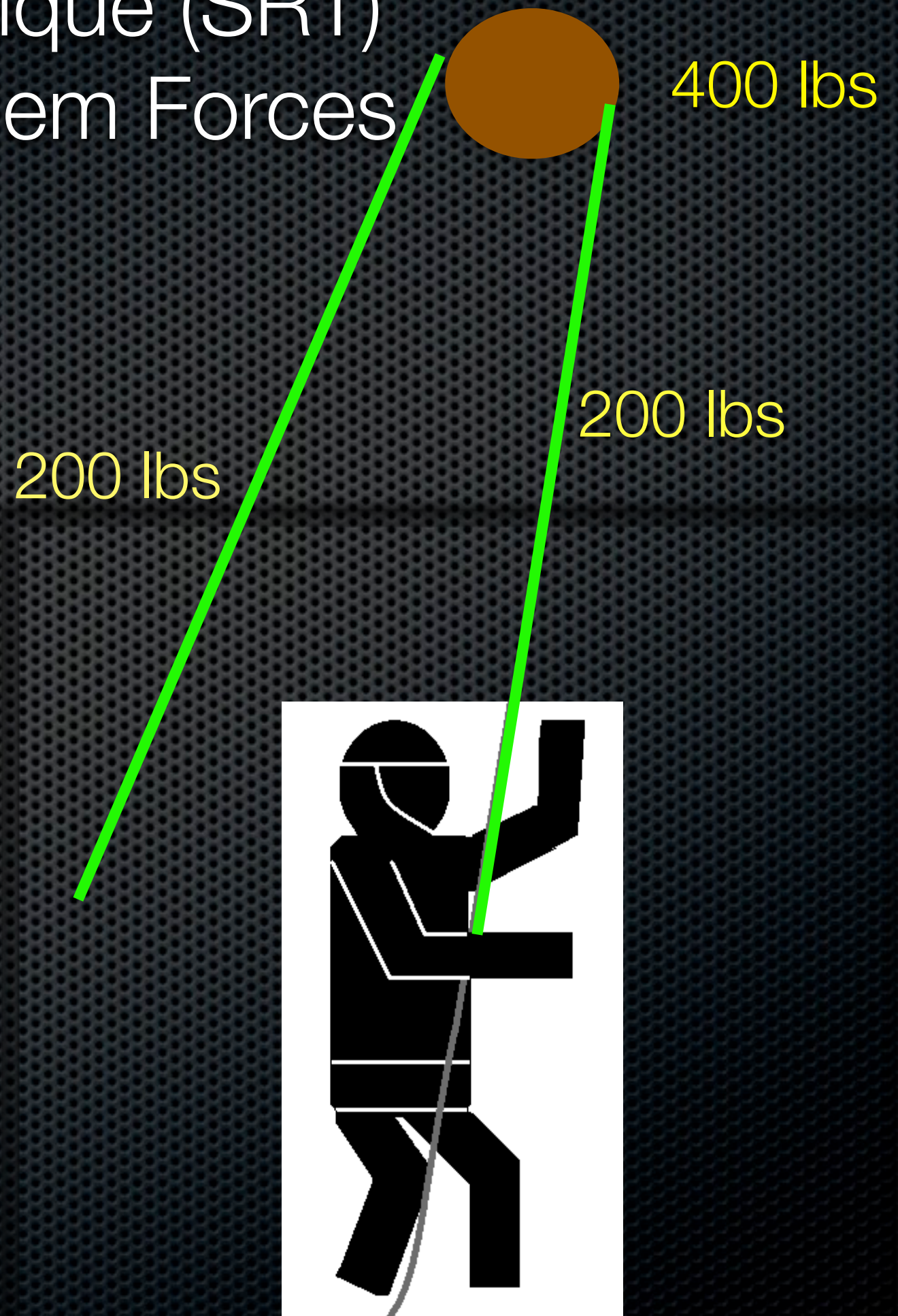
# Basal Anchor's



# Stationary Rope Technique (SRT) Arborist Climbing System Forces

Arborist SRT Climbing  
System Provides a 1:1  
ratio while ascending  
descending and  
performing work  
position / access

**Basal Anchor**



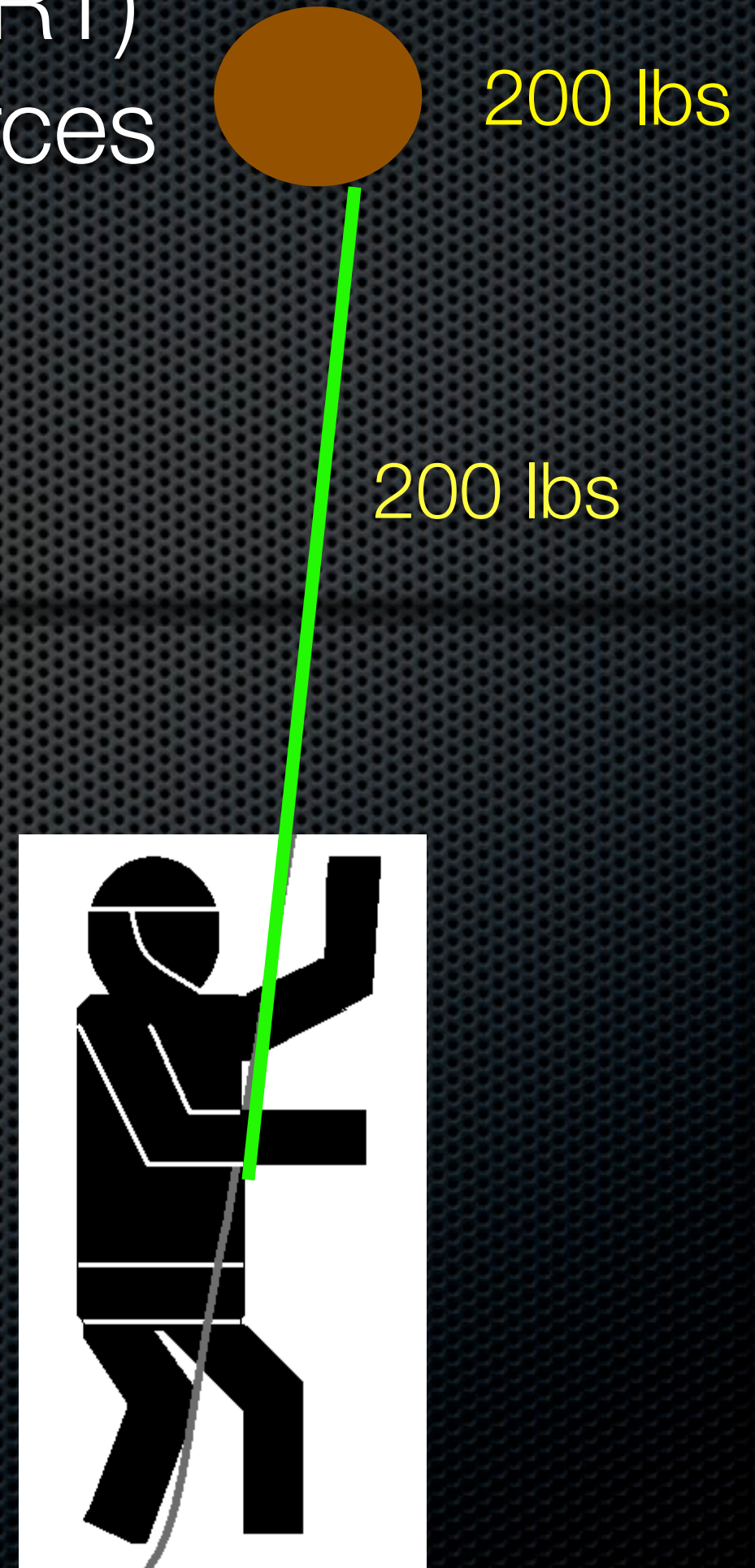
# Canopy Anchor's

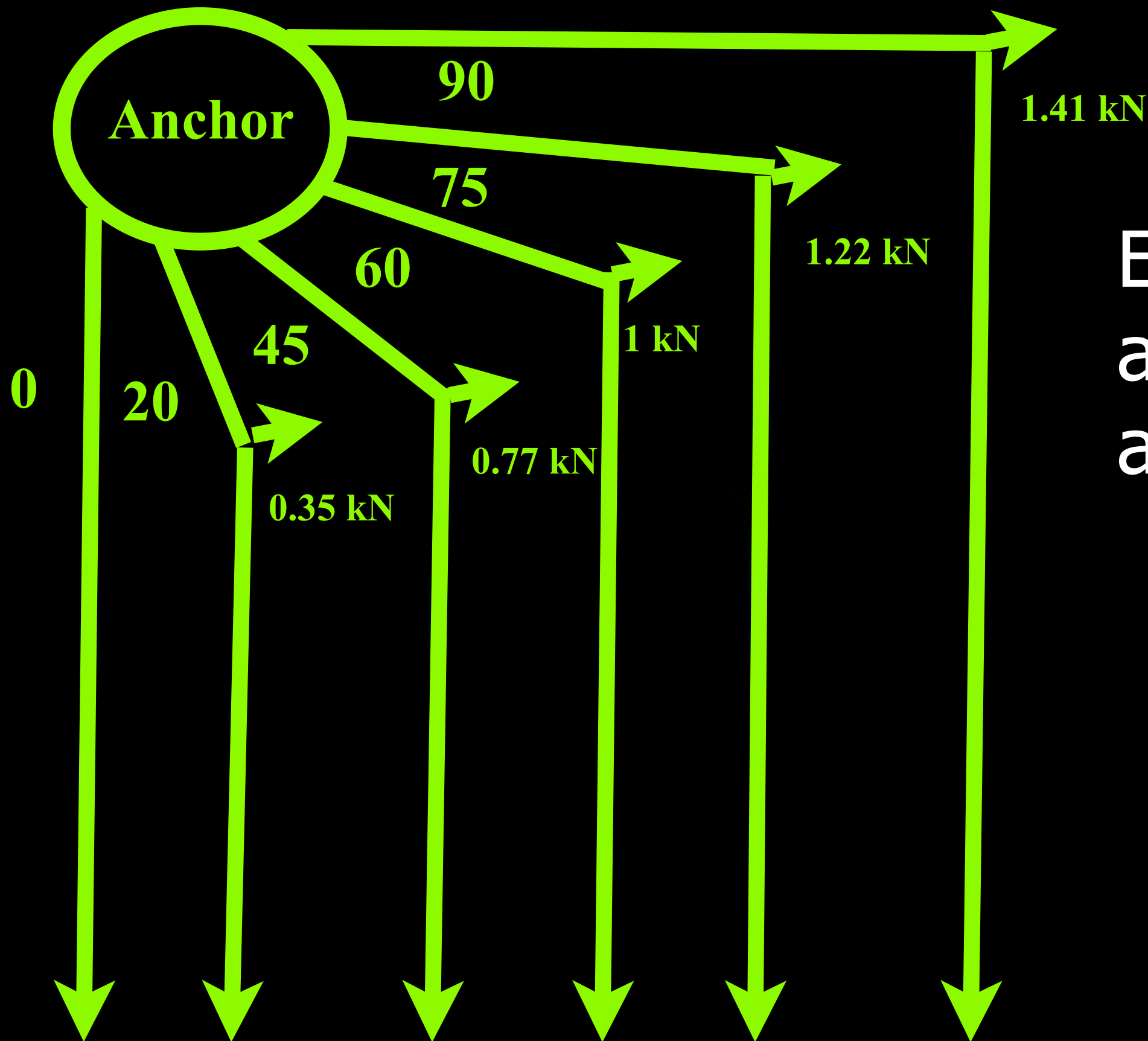


# Stationary Rope Technique (SRT) Arborist Climbing System Forces

Arborist SRT Climbing  
System Provides a 1:1  
ratio while ascending  
descending and  
performing work  
position / access

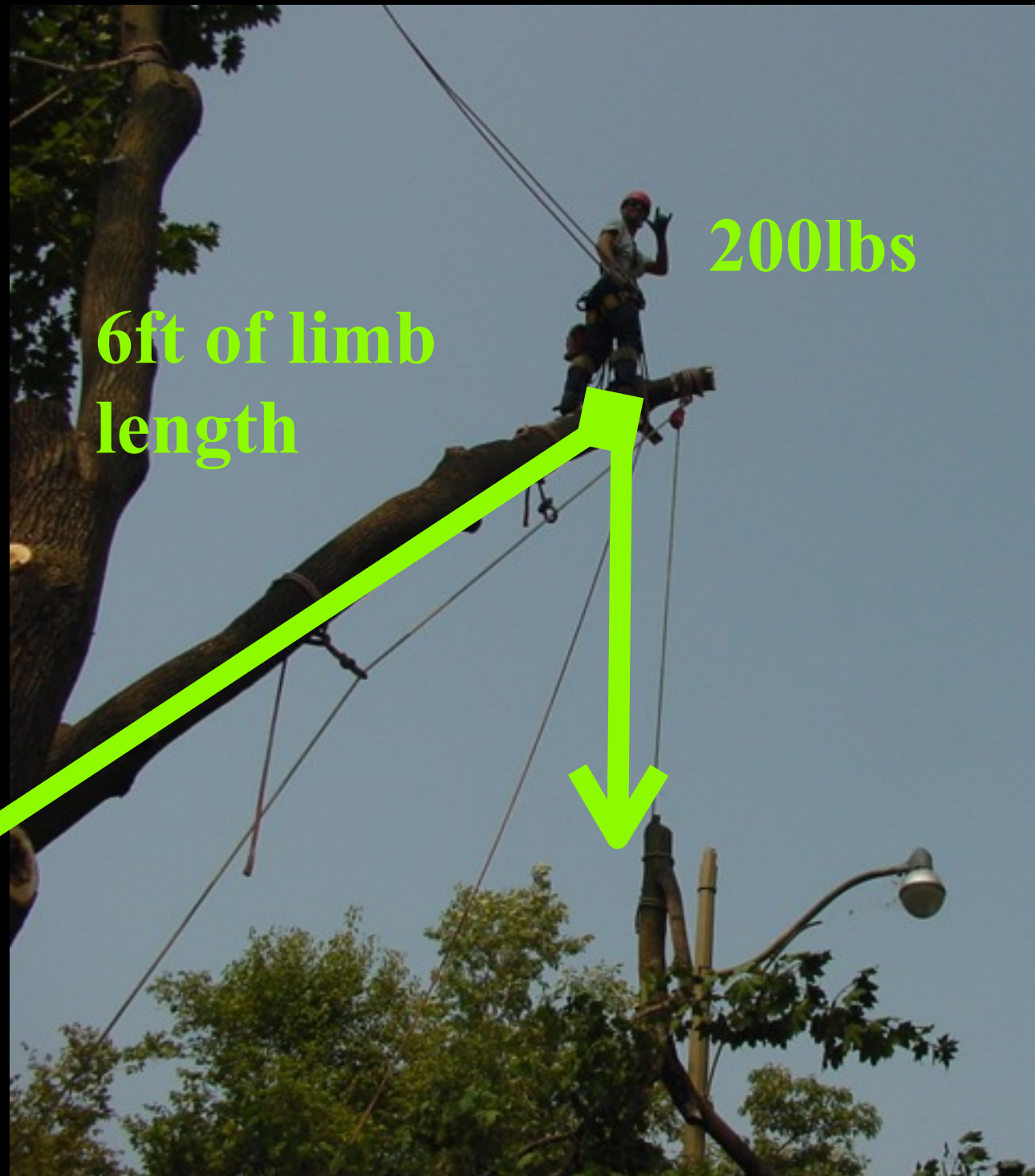
**Canopy Anchor**





Effect of Rope  
angle on  
anchor point.

# Bending Moment



## Tree Limb Bending Moment

Force x Distance = Torque

200lb x 6 ft of limb length

**1200lbs of force!!!!**