



STREAM-GAGING CABLEWAYS
USGS - Inspection Checklist

Station Name _____ Number _____
Review previous inspection form. List any important notes: _____
Cable Type: EEIP EIP SS Other; Cable Diameter _____ in; Clear Span _____ ft; Design Sag _____ ft

Right/Left Bank
(cable car side)

ANCHOR:

Anchor Type: Mass - Side hill - Rock (Vertical or Horizontal / U-bar or Pin) - Tree - Other _____
Dimensions: L ___ W ___ D ___; Height above ground _____; Tree species _____; Tree diameter _____
U-bar diameter _____; installed in the vertical plane? Y N; at correct angle? Y N; _____
Anchors clean of debris? Y N -> Soil - Weeds - Bushes - Trees - Other _____
Signs of deterioration? Concrete Y N; Rock Y N; Tree Y N; Cable connections Y N
If YES, Explain _____
Fractures? Y N; Movement? Y N; Rust-Corrosion on U-bar? Y N
If YES, Explain _____
Notes _____

FOOTERS:

Footing type: Single - Combined; Dimensions: L ___ W ___ D ___; or Diameter _____ Depth _____
Height above ground level _____; Remarks _____
Support footers clean of debris? Y N -> Soil - Weeds - Bushes - Trees - Other _____
Signs of deterioration of concrete? Y N; Fractures? Y N; Movement? Y N
Attachments: Pins Bolts Other _____; Rust/Corrosion/Missing Nuts? Y N
Notes _____

MAIN CABLE:

Unloaded Sag _____; Angle to anchor _____; Cable Length (A-frame to anchor) _____
Connection at anchor: Socket - Turnbuckle - Clevis - Direct (must have thimble) - Other _____
Thimbles where required? Y N
Cable clips? Y N; Type _____; Installed properly? Y N Explain _____
Cable turn-back length _____; Number of clips _____; Proper torque? Y N
Signs of deterioration? Y N; Cable - Socket - Turnbuckle - Clevis - Thimbles - Clips - Other
If YES, What? Rust - Corrosion - Flaking - Broken/Kinked strands - Items missing - Cracks - Other
Explain _____
Is main cable span free of debris, brush, and other obstructions? Y N
Are cable car routes from A-frames to banks free of trees, brush, and other obstructions? Y N
Other _____

BACKSTAY/GUYLINES:

Cable use: Backstay - Guyline; Cable Type: EEIP EIP SS Other; Cable Diameter _____ in
Auxiliary U-bar(s)? Y N; Connection at A-frame: Eyebolt - Welded steel loop - Other _____
Eyebolt/Loop diameter _____; Forged? Y N; Shouldered? Y N; Remarks _____
U-bar to cable: Direct - Other; Thimbles where required? Y N; Cable turn-back Length _____
Cable clips? Y N; Type _____; Installed properly? Y N; Explain _____
Number of clips _____; Proper torque? Y N
Signs of deterioration? Y N Cable - Eyebolt - Thimbles - Clips - Other _____
If YES, What? Rust - Corrosion - Flaking - Broken/Kinked strands - Items missing - Cracks - Other
Explain _____

AIRCRAFT WARNING MARKER:

Is warning device required? Y N (SM 445-2-H CHAPTER 27)
Is warning device in place? Y N

CABLE SUPPORTS :

Support type: A-frame (steel - pipe - wood) - Tower - Vertical beam - Tree
Base width _____ Height _____; Cross members? Y N; Tree species _____; Tree diameter _____
Signs of deterioration? Y N; If YES, What? Fatigue - Rust - Corrosion - Wood decay
Explain _____
Configuration of base: Rigid - Hinge (pin); Are all components in place? Y N Explain _____
Platform? Y N; Material _____; Bolts/welds: VG G P; Grated? Y N; Handrails? Y N
Height above ground _____; Climbing device: Ladder - Bolts - Steps - Other _____
Is Fall Protection required? Y N (SM 445-2-H CHAPTER 44)
Main cable support: Saddle block - Sheave - Other _____; Diameter _____; D/d ratio > 10? Y N
Does groove size match cable diameter? Y N; Explain _____
Signs of deterioration of saddle block? Y N; If YES, What? Rust - Corrosion - Decay - Other _____
Notes _____

CABLE CAR:

Type: HIF -> Stand up - Sit down Is retrofit needed? Y N Installed? Y N
Other: -> Stand up - Sit down - Power; Material: Steel - Wood - Aluminum - Other _____
Tested per SM 445-2-H CHAPTER 41? Y N; Explain _____
Signs of deterioration? Y N; If YES, Where? Hanger bars - Sheaves - Seats - Floor - Other _____
What? Bent - Twisted - Deformed - Cracked - Rotted - Other
Explain _____
Bolts/Nuts: Rusted - Loose - Missing - Other; Remarks _____
Overall condition based on visual inspection: Good Fair Poor
Notes _____

Right/Left Bank
(non-cable-car side)

ANCHOR:

Anchor Type: Mass – Side hill – Rock (Vertical or Horizontal/U-bar or Pin) – Tree – Other _____
 Dimensions: L ___ W ___ D ___; Height above ground ___; Tree species _____; Tree diameter ___
 U-bar diameter _____; Installed in the vertical plane? Y N ; At correct angle? Y N
 Anchors clean of debris: Y N → Soil – Weeds – Bushes – Trees – Other _____
 Signs of deterioration? Concrete: Y N ; Rock: Y N ; Tree: Y N ; Cable connections: Y N
 If YES, Explain _____
 Fractures? Y N ; Movement? Y N ; Rust-Corrosion on U-bar? Y N
 If YES, Explain _____
 Notes _____

FOOTERS:

Footing type: Single – Combined; Dimensions: L ___ W ___ D ___; or Diameter _____; Depth _____
 Height above ground level _____; Remarks _____
 Support footers clean of debris? Y N → Soil – Weeds – Bushes – Trees – Other _____
 Signs of deterioration of concrete? Y N ; Fractures? Y N ; Movement? Y N
 Attachments: Pins – Bolts – Other _____; Rust/Corrosion/Missing Nuts? Y N
 Notes _____

MAIN CABLE:

Unloaded Sag _____; Angle to anchor _____; Cable Length (A-frame to anchor) _____
 Connection at anchor: Socket – Turnbuckle – Clevis – Direct (must have thimble) – Other _____
 Thimbles where required? Y N
 Cable clips? Y N ; Type _____; Installed properly? Y N ; Explain _____
 Cable turn-back length _____; Number of clips _____; Proper torque? Y N
 Signs of deterioration? Y N ; Cable – Socket – Turnbuckle – Clevis – Thimbles – Clips – Other
 If YES, What? Rust – Corrosion – Flaking – Broken/Kinked strands – Items missing – Cracks – Other
 Explain _____

BACKSTAY/GUYLINES:

Cable use: Backstay – Guyline; Cable Type: EEIP EIP SS Other; Cable Diameter _____ in
 Auxiliary U-bar(s)? Y N ; Connection at A-frame: Eyebolt – Welded steel loop – Other _____
 Eyebolt/Loop diameter _____; Forged? Y N ; Shouldered? Y N ; Remarks _____
 U-bar to cable: Direct – Other _____; Thimbles where required? Y N ; Cable turn-back length _____
 Cable clips? Y N ; Type _____; Installed properly? Y N ; Explain _____
 Number of clips _____; Proper torque? Y N
 Signs of deterioration? Y N Cable – Eyebolt – Thimbles – Clips – Other
 If YES, What? Rust – Corrosion – Flaking – Broken/Kinked strands – Items missing – Cracks – Other
 Explain _____

CABLE SUPPORTS :

Support type: A-frame (steel – pipe – wood) – Tower – Vertical beam – Tree
 Base width ___; Height ___; Cross members? Y N ; Tree species _____; Tree diameter _____
 Signs of deterioration? Y N ; If YES, What? Fatigue – Rust – Corrosion – Wood decay
 Explain _____
 Configuration of base: Rigid – Hinge (pin); Are all components in place? Y N ; Explain _____
 Platform? Y N ; Material _____; Bolts/welds: VG G P; Grated? Y N ; Handrails? Y N
 Height above ground _____; Climbing device: Ladder – Bolts – Steps – Other _____
 Is Fall Protection required? Y N (SM 445-2-H CHAPTER 44)
 Main cable support: Saddle block – Sheave – Other _____; Diameter _____; D/d ratio > 10? Y N
 Does groove size match cable diameter? Y N ; Explain _____
 Signs of deterioration of saddle block? Y N ; If YES, What? Rust – Corrosion – Decay – Other _____
 Notes _____

Are office records describing this cableway system complete and accurate? Y N (Update as required)
 What is the maximum stage this cableway can be safely used? _____
 Is this stage posted in the gage house? Y N ; Is this stage posted on the cableway? Y N
 Is the cable car locked in place to prevent unauthorized use? Y N ; Type of lock _____
 Warning signs in place? Y N ; Describe (number, type, etc.): _____
 Is USGS contact information clearly visible on cableway (SM 445-2-H CHAPTER 7)? Y N

INSPECTION RESULTS: THIS CABLEWAY IS SAFE TO USE: Y N

Explanation for any of the above items that need to be addressed:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

If a cableway system is determined to be UNSAFE, it must be removed from service until repairs can be made. Lock the cable car with a sturdy lock and/or remove the cable car completely at this time.

I certify that the inspection was conducted on this date; all elements of the cableway were checked; deficiencies were noted on the hazard elimination log; and, if necessary, the cable car was either locked or removed until repairs can be made.

Inspection Completed by _____ Title _____ Date _____
 Supervisory Review by _____ Title _____ Date _____