Emergency Contact Numbers and Radio Frequencies

County, State

Skamania County Sheriff911, or	509-427-9490
Emergency Radio Frequency Monitored by County SheriffChan	nel 1 and/or 3
Skamania County Ambulance Service, Life flight	509-427-5065
Washington State Highway Patrol1-	800-283-7805
Wildfire Control, USFS	509-427-3200
Volunteer Fire Dept, Carson/Stabler	509-427-8698
USFS	
USFS Wind River Work Station	509-427-3200
Mt. Adams Ranger District (Trout Lake)	509-395-3400
Greg Cox, District Ranger, Wind River RD	509-427-3201
Dan Fahrni, Law Enforcement	509-427-3209
Clair Lavendel, Forest Supervisor, GPNF	360-891-5100
WRCCRF and UW	
Wind River Canopy Crane Facility Office David Shaw, Site Director Mark Creighton, Crane Operator Dave Braun, Arbornaut Annie Hamilton, Program Coordinator	509-427-7028
University of Washington, College of Forest Resources	
Jerry Franklin, Program Director	206-543-2138
Emergency Contacts for Canopy Crane Employees	

Susan Shaw, (Dave Shaw)509-427-8644Merilee Creighton, (Mark Creighton)509-427-8236Steve Hamilton, (Annie Hamilton509-427-5607Becky Nelson (Dave Braun)541-386-7689

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Purpose and Implementation

Purpose

The purpose of the Wind River Canopy Crane Site Safety Plan (Safety Plan) is to identify hazards that may be encountered in the operation of the facility, to identify the individuals responsible for safe operation of the facility, and to set protocols for accident prevention and safety promotion. The facility is a static, freestanding tower crane .25 miles in from the forest edge of the T. T. Munger Research Natural Area. The crane s purpose is to allow access to the forest canopy for ecological research. The crane is 285 ft tall, with a load jib at 250 feet and capable of a 279 ft reach. The tallest tree in the stand is 212 ft. Researchers will be lifted above the forest and lowered to desired positions within and above the forest canopy in a suspended personnel basket (gondola). The Safety Plan includes considerations for the lifting of researchers in addition to general considerations for safe operation of a static, free-standing tower crane.

Responsible Personnel:

Work Phone: 509-427-7028

Home Phone:	
David Shaw-Site Director	Mark Creighton-Crane Operator
509-427-8644	509-427-8236
Annie Hamilton-Program Coordinat	or Dave Braun-Arbornaut
509-427-5607	541-386-7689
Safety Committee:	
David Shaw	Annie Hamilton
Mark Creighton	Dave Braun

Implementation:

The Safety Plan is made available at the Canopy Crane Facility Office (office). All researchers and temporary staff are urged to familiarize themselves with the plan; permanent staff gives input in updating the plan. The plan is also implemented through a regular schedule of meetings:

Formal Safety Committee Meetings (occur regularly) Safety Committee members, meet in the office Purpose: assessment of site activities in the context of the safety plan; update the plan.

Staff Safety Meetings (as needed)

All staff, meets in the office Purpose: assessment of site activities in the context of the safety plan

Hazard Analysis Meetings (as needed) Crane operator, arbornaut, and users meet on site Purpose: discuss safety considerations of research plan

Toolbox Meetings (on site informal meetings) Base of tower at end of shift, as needed

Formal Training Sessions (periodically scheduled): American Red Cross Adult CPR and Standard First Aid Vertical Rope, Rigging, Rescue Crane Operation, Inspection and Maintenance

Emergency Protocol for Wind River Canopy Crane

In case of a serious accident at the crane site:

- a) Attend victim, give standard first aid, make situation safe, comfort victim
- 1) Call 911 from phone in crane cab or dry shack
- 2) Contact office by phone or radio: office person makes all contacts needed for situation with district EMT, and Wind River Search and Rescue (WRSR) if needed. If communications down between the crane and the office, the office can be reached in 5 - 10 minutes by running or by golf cart.
- 3) Send a person, if available, to the office to coordinate help
- 4) Set up rescue rigging if situation requires (trained staff only)
- 5) Wait for EMS to arrive

Employee Safety Protocol Training

Basic Safety Training for Employees at the Wind River Canopy Crane Facility:

- 1) Standard First Aid and CPR: required for permanent employees, preferred for seasonal employees.
- 2) Familiarization with safety plan: all employees
- 3) Familiarization with rescue technique, equipment, and storage locations: all employees. Training in rescue reserved for the arbornaut and crane operator.
- 4) Familiarization with facility layout, gates, and access routes: all employees.
- 5) Familiarization with emergency procedures for medical emergency, fire, or other emergency situation: all employees
- 6) Coordination of operations: completion of work during normal hours (7 am -3:30 pm) is encouraged. If work is done outside of this time, no tower or tree climbing in the 20 acre special use area is allowed.

Areas of Hazard Potential

Operation of the Tower Crane

Potential problems in operation of the crane include: structural failure, motor failure, contact between personnel basket and obstacles, failure of cable, dropped suspended personnel basket, loss of electrical power, and failure of slewing bearing. The following inspections, test lifts, maintenance, operation guidelines, and training will minimize these potential problems.

Inspections

Inspections are made daily by the crane operator according to recommendations made by the manufacturer of the crane and rules issued by OSHA, State of Washington Dept. of Labor and Industries, National Safety Council, and ANSI. In general, the operator inspects the crane beginning at the bottom and then as he climbs the tower. Visual checks are made of bolts, welds, rust, structures, motors, wire rope, electrical cables and etc. before crane operation is begun. After turning on the crane s power, the operator makes sure all crane functions are normal. The tower crane is also be inspected by manufacturers representatives as needed.

Personnel Basket Hoisting Protocol

Prior to hoisting personnel, two safety checks are performed: the gondola inspection and a test lift, done by the arbornaut and crane operator. An orientation of users is done by the arbornaut. The purpose of the safety checks and the orientation is to be sure that all crane functions are normal, that no obstacles to movement exist, and that users are familiar with risks, permissible behavior, and emergency procedures. The Site Safety Officer Checklist is filled out by the arbornaut, and is signed by all users. Full orientation of users occurs for each group of new users throughout the day. The proposed route and activities by personnel in the gondola are reviewed with the crane operator before the lift. See Appendix IV.

Maintenance

Maintenance of the tower crane is the responsibility of the crane operator and follows the guidelines of the manufacturer. Maintenance occurs on a daily, weekly, monthly and annual basis. The crane manual lists the maintenance and inspection schedule.

Operation

A daily log will be kept by the crane operator, which is kept in the operators cab. Formal safety committee meetings and toolbox meetings will discuss any perceived problems with operation of the facility.

Fall Protection

Fall protection is paramount. Each individual entering the suspended personnel basket will have a hardhat, full-body fall-protection harness, and lanyard. Lanyards will be secured to specified attachment points on the gondola.

Suspended personnel basket

The site safety officer/arbornaut will provide orientation training to any individuals who will be lifted in the basket. This will include fitting of the harness, checking harness for adequate buckle lock, and reviewing safety standards and appropriate behavior in the suspended basket.

Tower Crane

No harness and lanyard is required on the tower portion of the crane, within the operators cab or on the counterbalance jib; however, a hardhat must be worn when at any location on the crane (except in the operators cab). A full-body fall-protection harness and split-tail lanyard is required on the mast, load jib, or when climbing on the structure of the crane outside bounds of usual movement. The lanyard must be clipped to a suitable attachment point at all times when working in these areas.

Fall Protection Work Plan

The Fall Protection Work Plan, as stipulated by the University of Washington, Environmental Health and Safety, describes hazards, protection methods, maintenance and inspection, and trained personnel. See Appendix II.

Electrical

The crane s electrical system consists of the following:

- 1) Power supply. (460 amps, 3 phase). Power for the crane is carried in a cable originating at a junction box at the base of the crane. The power cable runs up the side of the tower from junction box to a slipring assembly at the base of the cab. The switch for turnoff of all power is located on this electrical board.
- Slipring assembly. The slipring assembly permits the crane to slew in either direction without restriction. It consists of a junction box on the support section that contains connections for the power supply cable, the cables to the travel motors and the travel control circuit table.
- 3) Control Panels. Control panel S1 is in the operator s cabin; this panel contains the main switch and main contactor (crane power switch), control circuit transformer, and control systems for slewing and trolley travel. Control panel S2 is on the hoist unit base frame at the

back of the counterbalance jib; this control panel contains the hoist control system and the overload systems.

- 4) Operators control desk. Located in the operator s cabin, this is the operator s main control point; it is permanently connected to control panel S1 by a control cable.
- 5) Limit Switches. The tower crane s drive systems include movement limit switches which are pre-set during crane erection to suit special site conditions and restrictions. Overload protection switches are provided to prevent accidental or deliberate overloading of the tower crane s structure or machinery. These overload protection switches must be set to the crane manufacturer s recommended limits after the crane has been erected and load tested. The tower crane must not be put into service until the overload protection switches are set.
- 6) Power cable to suspended personnel basket. A cable system is attached to the jib via a power spooler on the trolley, to deliver 120 AC to the personnel basket.
- 7) Additional 110 AC outlets (GFI protected). Four outlets are on an electrical board at the base of the crane, and an additional outlet is located at each crane landing. In addition, two satellite conduit outlets are located in the crane circle at approximately 15 and 25 meters from the base of the crane. The crane staff must give permission for use of any outlet.
- 8) Grounding. The crane electrical system is grounded at the base by two ground cables.

Electrical Storm

In the event of a lightening storm, the gondola will be lowered near to the ground immediately, and personnel will step out without producing contact between the gondola and the ground. The tower will also be evacuated, and contact between the ladder and the ground will also not be made. Lifts will be suspended until weather conditions have changed enough to allow continuation of safe crane operation; the crane operator and arbornaut will assess weather conditions and make this decision.

Hazard Trees/Snags

Snags or trees may potentially fall and hit people, vehicles, the suspended personnel basket or the

crane. A formal hazard tree and snag examination and mitigation plan has been formulated in three phases. First, a hazard snag survey and felling operation along the access road and crane base has been completed. This involved felling all snags with potential to hit the road or crane; alternatively, some were topped where allowable to maintain snag structure. Sixty-six snags were felled in 1995. Second, a hazard tree/snag survey was conducted around the base of the crane. Large trees that could possibly hit the crane with lean and/or basal defects were hazard rated and snags cut at the base or topped. Third, hazard zones were designated within the

canopy

crane access zone around snags or trees with high hazard ratings. These zones will not be visited when unfavorable weather conditions occur, typically windy, until the arbornaut and crane operator make an assessment and give approval. Hazard tree surveys will be repeated periodically. See Appendix 6. Hazard Tree and Snag Management.

Additional Equipment

Any additional equipment to be attached to the tower or put in the basket has to be approved by the crane operator and the safety committee prior to loading the gondola. Potential hazardous equipment would include items such as batteries, heaters, and pressurized gases, as well as items that project from the crane tower. All small tools or equipment used on the tower, mast (30 feet of tower above cab), jib, or gondola will be used with lanyards attached. All additional equipment, tools, or objects on tower platforms, attached to tower lacing or legs, or to counter jib must be securely fastened and inspected after installation.

Access

Under heavy snow conditions crane operations will cease until sufficient access for emergency vehicles has been plowed to the base of the crane. Gates are to be kept unlocked during operations.

Electrical Equipment

Special care will be taken with electrical appliance use in the gondola to minimize the risk of electrical shock. All such devices are pre-approved by the arbornaut. Rechargeable batteries (not 12 volt lead-acid car batteries), direct AC, or AC to DC using an inverter are preferred methods. Devices must have fuses, and proper insulation to prevent shocks. The gondola power supply is equipped with a breaker, which will trip in the event of an accidental grounding of a device using the supply.

Tree Climbing

WRCCRF will require radio communication if tree climbing within the special use area. Staff will help to facilitate any rescues needed. Tree climbing will ONLY occur in designated NON-pristine trees, and be part of a research plan. Tree climbers to be approved by safety committee, and must communicate route plans with the arbornaut if crane use time will overlap with climbing. A safe working distance will be maintained between the gondola and climbers.

Fire Suppression Plan

When fire is first observed on the crane or in the special use area:

- 1) Assess situation
- 2) Attempt to put fire out immediately with available tools
- 3) Alert all people at the site (at the crane and the office)
- 4) Call 911 if necessary: from the phones at the crane if possible or by phone from the office
- 5) Develop chain of command: define leader, and designate tasks, such as turning on the valve for the fire hose and alerting the office, by phone from the crane, or by other means if phones are unavailable.

Because a fire that involves the crane, the two dry shacks, or nearby electrical components would probably produce an insulation breach around high voltage wiring, it will be attacked with type ABC chemical extinguishers. Six are available at the site: one in each dry shack, two outside at the crane base, one in the operators cab, and one on the counter-balance jib. If necessary, 911 will be called. Breakers at the base of the crane will trip in the event of electrical shorts involving the 110 AC outlets on the tower and the main power supply to the crane. Wildfire is a potential problem in surrounding forests, and in the crane stand. If smoke is observed that indicates potential wildfire, we will notify fire control at the Wind River Ranger District. An attempt will be made to fight a small ground fire, such as a smoldering burn produced by a cigarette or power tool, using available tools and the fire hose; 911 will be called if necessary. Fire tools include a Pulaski, shovel, and rake that are stored at the crane base. During fire season, a fire hose is laid to the crane from a hydrant at the gate of the RNA, approximately 2150 feet away. This hydrant must be opened to pressurize the hose, and can be reached in about 5 minutes by golf-cart or running. If the fire can t be immediately extinguished, it will be assumed that it threatens the special use area, crane, and surrounding forest, and we will cut power to the crane and evacuate the area. The office, located in a paved area in a field, is a safe area, and would be a likely staging area in the event of a fire.

Actual Fire Scenario:

In July 1999, a lightning strike approximately .75 miles from the crane produced a smoldering fire in two snags; these were located outside of the special use area beyond a wetland bordering the east side of the RNA. The crane operator noted the fire during a lift. Facility personnel alerted authorities, and a forest service crew monitored the fire until it went out several weeks later. It was decided that operations could continue in this case.

Troubleshooting Examples

Worst Case Scenario

Problem: High winds, loss of power, loss of slewing brakes; gondola dragging through tree crowns.

Solution:

- 1) Crane operator calls office, 911
- 1) Secure loose equipment
- 2) Lie down on floor of gondola below handrail
- 3) Attend to injuries with first aid
- 4) Evacuate gondola when weather calms and gondola is in safe position

Medical Emergencies

Problem: Emergency requires ambulance and/or medical treatment.

Solution:

- 1) Call office by radio or phone.
- 2) Call 911 using phone in operator s cab or dry shack.
- 3) Send someone (if available) to the office to facilitate emergency response.

Problem: Personal injury in gondola, not life threatening.

Solution:

- 1) Communicate with crane operator.
- 2) Give first aid.
- 3) Set down at crane base and transport victim if needed.

Mechanical/Electrical Problem with Crane

Problem: Loss of movement of the gondola, caused by the loss of one or more primary functions (hoist, trolley, swing) because of a mechanical problem or obstruction, or all functions due to a power outage.

Solution:

- 1) If not a life threatening situation and a power outage is the cause, wait for office person to contact PUD for an estimated time for power restoration; if a short time is predicted, do not evacuate. See Appendix VII for procedure to evacuate suspended personnel basket.
- 2) If a long outage is predicted, or a mechanical problem or obstruction caused the problem, evacuate the gondola.
 - a. If a mechanical problem leaves some primary functions operable, risks of evacuation should be minimized. If trolley or swing movement is lost, gondola is lowered to the road or other clear area and occupants step out.

- b. If both of these functions are lost and there is no clear area beneath, or if hoist is lost, the arbornaut then evacuates all users from the gondola by setting a belay rescue system, and then rappels to the ground.
- c. In the event of the hoist function being lost, the gondola should be aligned over a clear area, if possible, before evacuation.
- d. In the event of an obstruction preventing gondola movement (such as an entanglement or snag fall) the gondola possibly is evacuated with belay rescue system after condition of gondola is assessed and stabilized. Use of other means and additional personnel would be likely.

Mechanical/Electrical Problem with Crane and Bad Weather

Problem: Loss of movement of the gondola, caused by the loss of one or more primary functions (hoist, trolley, swing) because of a mechanical problem or obstruction, or all functions due to a power outage. Problem occurs during high winds, low temperature, rain, freezing rain, snow, or some combination.

Solution:

Same procedures followed as in good weather, except with additional caution because of weather. Raingear and warm clothing would be worn. If rope evacuation can t be done safely, it would be postponed until weather conditions are safe.

Problem: Icing causes jam in hook block, trolley, or other moving parts

Solution:

Avoid lifts during heavy snow or freezing rain. If the problem arises anyway, and movement of the gondola is not possible, evacuate the gondola.

Communication Problem

Problem: Communication is totally lost between operator and gondola.

Solution:

Operator stops all crane movement, then tries to make verbal contact through crane cab window. If no contact is made with arbornaut or occupants, the crane operator assess the situation and sets gondola down on the ground; the crane operator can set the gondola down without assistance in nearly all foreseeable circumstances if crane function is normal. Crane operator then calls the office and possibly 911 for assistance.

Problem: Main radio communication fails between operator and suspended personnel basket.

Solution:

Arbornaut uses back-up radio; this radio is left on at all times. It may be possible for arbornaut to shout or use hand signals if within view. See Appendix I for hand signals.

Medical Problem with Arbornaut or Operator

Problem: Arbornaut Incapacitated

Solution:

Occupant of gondola communicates with crane operator on radio, operator calls 911 and office for back up. Crane operator sets gondola on ground.

Problem: Gondola can t be set down, arbornaut incapacitated, rescue required from jib. Solution:

Crane operator calls 911 and canopy hut for assistance. Crane operator sets up rescue rigging system to reach gondola from jib, which may be used by additional personnel. The crane operator may use it to provide first aid before additional personnel arrive.

Problem: Crane operator suddenly becomes incapacitated. (as in heart attack) Solution:

Deadman controls stop all functioning of the crane, which stops movement of the gondola. After communication attempts fail, Arbornaut notifies office, and someone there calls 911. Then arbornaut rappels from the gondola and climbs the tower to the operators cab to offer first aid/CPR.

Problem: Evacuation of operator from cab required (such as medical emergency, etc.) Solution:

The crane operator is fitted in a quick clip victim harness, and is lowered from the window in front of the operators cab using brake rack and belay system. Additional personnel would likely do this operation. The arbornaut would evacuate the gondola.

Wind River Canopy Crane Research Facility Site Safety Plan

Wind River Canopy Crane Research Facility Site Safety Plan

Appendix II: Fall Protection Plan (Continued)

University of Washin	ngton		Personal Prote	ective Equij
	CERTI	FICATION OF HAZARD AS FORM/WORK SHEET	SSESSMENT	
Department	College of Forest	Resources		1
Location	Wind River Cano	opy Crane		
Note:		_		
Fall protection work	plan submitted/followe	ed.		<u> </u>
Job/Process/ Activity	Hazards	PPE Required (specify type, brand, model if necessary)	Persons Requiring PPE	Dates Traini
Field work at crane site on ground	Overhead objects falling	Hard hat	All persons in crane area	Orientatio
Field work in/from suspended personnel basket	Falling from basket	Hard hat, class III full body harness, lanyard	All persons in basket	Orientatic each user
Field work on crane structure	Falling, overhead hazards, hitting head on structure	Hard hat, class III harness when working outside railings, with 2 lanyards	All persons	Orientatic each user
Safety rescue training	Falling, overhead hazards	Hard hat, class III harness when working outside railings, with 2 lanyards. Rope: mainline and belay always.	All persons	Four time year
I certify that the above workplace hazard assessment was performed by me on: (date) 8/22/95				
Name: David Sha	aw	Title:	Site Director	
Signature:				
Environmental Healt	h and Safety 6/95			

Appendix III: Safety Equipment Lists for Basket and Operator s Cab

Suspended Personnel Basket/Operator s Cab-Each With This Gear

General Gear:

Motorola radio, SP10, with extra batteries Back-up radio, with extra batteries) Mobile phone First-aid kit Binoculars Head lamp Batteries Fire extinguisher (operator s cab only))

Each individual:

Hard hat Full body harness lanyard

Rescue/Evacuation Gear:

Two 300 ft rope/lifelines Two rope bags One pair leather gloves Eight carabiners Brake rack Mechanical Ascenders Webbing anchors Webbing, 5 colors, 5 lengths Four pulleys Two 8m lengths, 8mm perlon rope, tied with load releasing hitch Two sets of prusiks, 125 cm and 75 cm lengths = pair, color coded screamer suit (evacuation suit) Edge softeners

In dry shack at base of crane:

Mobile phone Fire Extinguishers First-aid kit Litter Litter harness Shovel Pulaski Rake

Appendix IV: WRCCRF SITE SAFETY OFFICER PERSONNEL BASKET HOISTING CHECKLIST

PERSON COMPLETING FORM_____ DATE _____

BASKET______RATED LOAD CAPACITY_____

CRANE OPERATOR_____

SITE SAFETY OFFICER CHECKLIST

YES NO

2. Conferred With Crane Operator About Equipment and Weather Conditions 3. Personnel Basket Inspection Checklist Complete 4. Test Lift Checklist Complete 5. Orientation Of Users Checklist Complete 6. All Persons Using Basket Wearing Class III Safety Harnesses and Clipped To Proper Basket Attachment Point 7. Users Familiar With Each Job To Be Performed and the Limitations of the Crane and Basket In Use 8. Signal Person Identified 9. Users Informed of Site Safety Officer Checklist and Protocol
3. Personnel Basket Inspection Checklist Complete 4. Test Lift Checklist Complete 5. Orientation Of Users Checklist Complete 6. All Persons Using Basket Wearing Class III Safety Harnesses and Clipped To Proper Basket Attachment Point 7. Users Familiar With Each Job To Be Performed and the Limitations of the Crane and Basket In Use 8. Signal Person Identified 9. Users Informed of Site Safety Officer Checklist and Protocol
 4. Test Lift Checklist Complete 5. Orientation Of Users Checklist Complete 6. All Persons Using Basket Wearing Class III Safety Harnesses and Clipped To Proper Basket Attachment Point 7. Users Familiar With Each Job To Be Performed and the Limitations of the Crane and Basket In Use 8. Signal Person Identified 9. Users Informed of Site Safety Officer Checklist and Protocol
5. Orientation Of Users Checklist Complete 6. All Persons Using Basket Wearing Class III Safety Harnesses and Clipped To Proper Basket Attachment Point 7. Users Familiar With Each Job To Be Performed and the Limitations of the Crane and Basket In Use 8. Signal Person Identified 9. Users Informed of Site Safety Officer Checklist and Protocol
6. All Persons Using Basket Wearing Class III Safety Harnesses and Clipped To Proper Basket Attachment Point 7. Users Familiar With Each Job To Be Performed and the Limitations of the Crane and Basket In Use 8. Signal Person Identified 9. Users Informed of Site Safety Officer Checklist and Protocol
 7. Users Familiar With Each Job To Be Performed and the Limitations of the Crane and Basket In Use 8. Signal Person Identified 9. Users Informed of Site Safety Officer Checklist and Protocol
8. Signal Person Identified
9 Users Informed of Site Safety Officer Checklist and Protocol
5. Osers morned of site safety officer checkinst and rotocor
10. Site Safety Officer Witnessed the Trial Lift
11. Released Personnel Lift for Operations To Signal Person and Crane Operator

PERSONAL BASKET INSPECTION

YES NO

_	
1. All Chokers & Cotter Pins in Proper Condition	
2. Test Weight Installed	
3. Hand Rails in Tact	
4. Midrails in Tact	
5. Toe Boards and Safety Screens in Tact	
6. Shackles and Lifting Rings Inspected for Wear	
7. Basket Floor Shows No Signs of Cracking, Corrosion, or Damage	
8. Safety Choker is Installed	
9. General Condition of Basket is Functional and Undamaged	

TEST LIFT

YES NO

1. Lifted Basket With Test Weight Installed to Approximately One (1) Foot	
2. Observed Condition of Basket	
3. Observed Condition of Slack in Wire Rope	
4. Moved Basket to All Elevations and Over Stand	
5. Observed Stability of Crane and Basket	
6. Conferred With Operator to Determine That the Crane Lift Was Within Expectations	
7. Test Weight Removed From Basket	

COMPLETED BY (SIGNATURE):

ORIENTATION OF USERS	YES	NO
1. Fitting of Harnesses Complete		
2. Lanyard Attached Properly		
3. Hard Hat or Helmet Worn		
4. User Made Aware of Limitations of Movement in Basket		
5. User Made Aware of Dangers Associated with Use		
 6. User Made Aware of Rescue Procedures * safety/rescue gear in gondola * evacuation of gondola * back-up systems for rescue, who is responsible * use of radio, and back up radio 		
7. User Made Aware of Hand Signal Decal		
8. User Made Aware of Site Safety Officer Checklist		
 Does the User Have Any Physical or Mental Disabilities that would preclude Exposure to Heights or Rescue That Require Lowering From the Personnel Basket 		
10. No Smoking in RNA, be quiet, stay on road way, restroom facility located		
at entry gate.		

USER SIGNATURES

I have been informed of the conditions of use, dangers and limitations involved, and safe operations of this suspended personnel basket. I acknowledge that physical injury and death are risks inherent in this project and in the use of the University of Washington facilities and that I assume such risks. I represent that I am physically capable, with or without reasonable accommodation, of undertaking this activity. I agree not to claim against the University of Washington for injury, damages, or losses other than those arising from the negligent acts or omissions of the University of Washington, it s employees, students, and agents acting the course and scope of their University-imposed duties. If I am injured, I consent to emergency medical treatment at my expense.

NAME	SIGNATURE	DATE

Appendix V: Tower Rules and Cautions

Read this list and sign it before climbing the crane tower.

- Permission is required before climbing tower.
- Use extreme caution when climbing tower.
- Do not climb past upper platform (identified by unauthorized personnel sign).
- Tower and ladder is slippery when wet.
- Climbing the tower will not be allowed in frosty or icy conditions.
- Do not interfere with meteorological stations.
- Do not extend body parts beyond railings
- Climbing the tower is physically challenging, do not attempt if you are not in good shape.
- Do not climb tower if you are afraid of heights.

- If you view any object falling yell, ROCK!!! •
- While climbing maintain three points of contact with ladder at all times. •
- Buddy system in effect. •

I have been informed of the conditions of use, dangers and limitations involved in climbing the crane tower and performing approved activities thereon. I acknowledge that physical injury and death are risks inherent in this project and in the use of the University of Washington facilities and that I assume such risks. I represent that I am physically capable, with or without reasonable accommodation, of undertaking this activity. I agree not to claim against the University of Washington for injury, damages, or losses other than those arising from the negligent acts or omissions of the University of Washington, it s employees, students, and agents acting the course and scope of their University-imposed duties. If I am injured, I consent to emergency medical treatment at my expense.

Name / Signature	Date
	· · · · · · · · · · · · · · · · · · ·