

### Atmospheric Radiation Measurement Climate Research Facility/ North Slope of Alaska/Adjacent Arctic Ocean (ACRF/NSA/AAO)

#### Alternate Buddy System

Consider the following scenario:

It is 9 AM in the morning at the duplex in Barrow, Joe, one of the technicians at the ACRF/NSA/AAO site, must go to the Great White to service the instruments and his fellow worker, who normally goes with him, has called in sick today. Weather conditions are severe with 30 knot winds, blowing snow, and a – 70 F wind chill. Joe finishes his morning coffee and heads out to the site on the snow machine without contacting anyone at UIC, BASC, CMDL or elsewhere, prior to his departure. Joe has difficulty seeing the tracks on his way out to the Great White but continues on since he is nearly there and expects conditions to improve as the day progresses. Near the Great White, and still on the snow machine, he encounters white out conditions, becomes disoriented, hits an unseen snow drift and overturns the snow machine. He sustains a serious, bleeding head injury, and lies face up and unconscious on the snow. Although CMDL personnel normally keep an eye out for the work crews at the Great White, they are running errands in town today and won't get out to the site until well after noon. Walter Brower, ACRF/NSA/AAO Site Facility Manager, has been in a meeting all morning at BASC and has been unable to check up on work progress at the duplex and the Great White. In fact, he isn't even aware that Joe's co-worker has called in sick today. Joe is finally discovered by CMDL personnel at about 1PM. When found, he is in severe shock, has serious frostbite, and is dangerously hypothermic.

Under nearly all circumstances, a buddy system would make outdoor work activities on the North Slope far safer than working alone. A buddy system promotes safety since teamed workers can monitor each other's work activities. In the event that an accident occurs that requires immediate attention, a co-worker can step in and take appropriate action.

In some instances however, a buddy system is not always feasible and a regular site worker may be required to work alone at the Great White or other remote site. This situation carries more risk than a normal buddy system, particularly during severe winter weather. During severe weather conditions, travel to the Great White or other remote facilities without a "buddy" should be avoided, especially if the road is closed to vehicular traffic. Under these conditions, the increased risk associated with snow machine travel is not work the potential benefits. Under more benign conditions, where a buddy system is not workable, an alternate procedure as described below should be followed.

# **1.** Communicate your work schedules to Walter Brower or an alternate person as identified below

The worker who is planning on working alone at an outdoor site, such as the Great White, should communicate his anticipated work schedule to Walter Brower or Jimmy Ivanoff. If a routine work schedule is followed, repeated notification is not necessary. If a normal work routine at the site is altered for some reason, the schedule changes should be communicated to Walter. Key information to be communicated is:

Who is going to the site The work activity Estimated time of departure Estimated time of return

Walter Brower is the primary point of contact for notification of working alone at the site. In Walter's absence, Jimmy Ivanoff would be the primary point of contact. The personnel at CMDL or BASC may also be used as points of contact. This alternative to the buddy system is to be used only with Walter's permission. Other contacts are listed below:

Name	Affiliation	Phone	Cell Phone
Walter Brower	ACRF/NSA/AAO Site	907-852-5818 or 5821	907-367-3820
Jimmy Ivanoff	ACRF/NSA/AAO Site	907-852-5818 or 5821	907-367-3824
NOAA Global	NOAA/CMDL	907-852-6500	
Monitoring Division			
Station Chief			
Anne Jensen	UIC Science	907-852-0924	907-878-5656

The worker should notify the point of contact upon safe arrival at the work site as well as upon departure from the work site. The point of contact is responsible for making contact with the worker if no communications have been received from the site worker after a previously agreed upon period of time.

Note that this alternate buddy system policy applies primarily to regular site workers and not visitors with occasional work responsibilities at the site. Regular site workers include UIC-Science contract personnel as well as personnel from the University of Alaska-Fairbanks who routinely frequent the site. The site facilities manager (Walter Brower) makes the final determination as to who can work alone at the site and who should be accompanied.

#### 2. Always carry a cellular phone and spare battery

The site worker must also possess a cellular phone and a spare fully charged battery when working alone at ACRF/NSA/AAO sites. The phone and battery must be in the worker's possession at all times while at the work location. When the worker is outdoors, the phone and spare battery should be kept warm in an internal parka pocket. If possible, Walter's cellular number and the Barrow emergency 911 number should be entered into the phone's one-touch or speed dial feature. Cellular phones are available for checkout from the local site manager.

## **3.** Under severe weather conditions, travel by snow machine to a remote site requires traveling with a co-worker on a separate snow machine.

Under severe weather conditions, such as blowing snow approaching white out conditions, traveling alone to a remote site such as the Great White by snow machine is not allowed under any circumstances. Unless absolutely necessary, travel should not be attempted.

Implementation of the above work practices requires some judgment on the part of all involved. Clearly the process is most important under severe winter weather conditions; however, one must keep in mind that an incapacitating accident can occur at any time under any weather conditions.