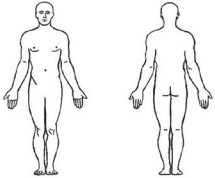




## REFERENCES

SOAP Note

SOAP NOTE

|                                                                                    |           |             |               |      |    |      |      |      |
|------------------------------------------------------------------------------------|-----------|-------------|---------------|------|----|------|------|------|
| Patient Name                                                                       |           | DOB         |               |      |    |      |      |      |
| SUBJECTIVE                                                                         |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
| S                                                                                  | Symptoms: | A           | Allergies:    |      |    |      |      |      |
|                                                                                    |           | M           | Medications:  |      |    |      |      |      |
|                                                                                    |           | P           | Past History: |      |    |      |      |      |
|                                                                                    |           | L           | Last Meal:    |      |    |      |      |      |
|                                                                                    |           | E           | Events:       |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
| OBJECTIVE                                                                          |           |             |               |      |    |      |      |      |
| EXAM                                                                               |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|                                                                                    |           |             |               |      |    |      |      |      |
|  |           | VITAL SIGNS |               |      |    |      |      |      |
|                                                                                    |           | Time        | Pulse         | Resp | BP | Skin | Temp | AVPU |
|                                                                                    |           |             |               |      | /  |      |      |      |
|                                                                                    |           |             |               |      | /  |      |      |      |
|                                                                                    |           |             |               |      | /  |      |      |      |
|                                                                                    |           |             |               |      | /  |      |      |      |
|                                                                                    |           |             |               |      | /  |      |      |      |
|                                                                                    |           |             |               |      | /  |      |      |      |
|                                                                                    |           |             |               |      | /  |      |      |      |



Access the controlled version of this form on the USAP Master List. / PARENT: MED-SOP-0003

REFERENCES



# Emergency Incident Worksheet

## EMERGENCY INCIDENT WORKSHEET

Expand the cells in this form or attach additional pages as needed.

| INITIAL INFORMATION                                               |                                                                        |                                                       |                                                       |
|-------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| Time                                                              |                                                                        | Freq/Phone                                            | Caller Name                                           |
| Location                                                          |                                                                        |                                                       |                                                       |
| Situation                                                         |                                                                        |                                                       |                                                       |
| INJURY OR ILLNESS                                                 |                                                                        |                                                       |                                                       |
| Information                                                       | Patient 1                                                              | Patient 2                                             | Patient 3                                             |
| Name                                                              |                                                                        |                                                       |                                                       |
| Gender                                                            |                                                                        |                                                       |                                                       |
| Age                                                               |                                                                        |                                                       |                                                       |
| Conscious?                                                        | <input type="checkbox"/> Y <input type="checkbox"/> N                  | <input type="checkbox"/> Y <input type="checkbox"/> N | <input type="checkbox"/> Y <input type="checkbox"/> N |
| Symptoms / Injury Type (Area of Body, Bleeding, Deformity)        |                                                                        |                                                       |                                                       |
| Mechanism of Injury (Possible Back / Spine / Neck / Head Injury?) |                                                                        |                                                       |                                                       |
| Pain Level From 1 (Lowest) to 10 (Highest)                        |                                                                        |                                                       |                                                       |
| Highest Level of Caregiver's Training                             |                                                                        |                                                       |                                                       |
| SPILL                                                             |                                                                        |                                                       |                                                       |
| Active Spill?                                                     | <input type="checkbox"/> Y <input type="checkbox"/> N                  | If Yes, Fluid Type (e.g., Fuel, Glycol)               |                                                       |
| Related Injuries?                                                 | (Specify in Injury or Illness section)                                 |                                                       |                                                       |
| Fire or Risk of Fire?                                             | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |
| Volume of Spill (Gallons)                                         | ____ Gallons                                                           |                                                       |                                                       |
| Dimensions of Spill Area                                          |                                                                        |                                                       |                                                       |
| LOSS OF SHELTER OR INFRASTRUCTURE                                 |                                                                        |                                                       |                                                       |
| Shelter(s) Available (Type and Quantity)                          |                                                                        |                                                       |                                                       |
| Already Set up?                                                   | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |
| Fire?                                                             | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |
| Related Injuries?                                                 | (Specify in Injury or Illness section)                                 |                                                       |                                                       |
| Food Available? (Estimate Person-Days)                            | <input type="checkbox"/> Y <input type="checkbox"/> N ____ Person-Days |                                                       |                                                       |
| Fuel Available? (Cooking + Heating: Estimate Days)                | <input type="checkbox"/> Y <input type="checkbox"/> N ____ Days        |                                                       |                                                       |
| Comms, Power, Batteries?                                          | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |
| AIRCRAFT MISHAP                                                   |                                                                        |                                                       |                                                       |
| Aircraft Type and Call Sign                                       |                                                                        |                                                       |                                                       |
| Related Injuries?                                                 | (Specify in Injury or Illness section)                                 |                                                       |                                                       |
| Crew Status                                                       |                                                                        |                                                       |                                                       |
| Aircraft Engine/Prop/Rotor Still Running?                         | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |
| Fire or Risk of Fire?                                             | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |
| Spill?                                                            | (Specify in Spill section)                                             |                                                       |                                                       |
| VEHICLE ACCIDENT                                                  |                                                                        |                                                       |                                                       |
| Vehicle Type and ID                                               |                                                                        |                                                       |                                                       |
| Related Injuries?                                                 | (Specify in Injury or Illness section)                                 |                                                       |                                                       |
| Vehicle Still Running or Moving? Stable?                          | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |
| Fire or Risk of Fire?                                             | <input type="checkbox"/> Y <input type="checkbox"/> N                  |                                                       |                                                       |



Access the controlled version of this form on the USAP Master List. / PARENT: FLD-PLN-0001

[illegible]

## Knots

Knots are essential for working and living in the field, and it helps to be familiar with knot terminology:

**Knot:** Ties a rope to itself.

**Hitch:** Ties a rope to another object (e.g., post, stake, = eye-ring grommet).

**Bend:** Ties two different pieces of rope together.

**Bight:** Curved or slack section of rope between two ends.

There are 13 knots you may find useful in the field (see figures at end of section).

### Figure 8 on a Bight

The figure 8 on a bight forms a secure, non-slip loop at the end of the rope that is difficult to untie after a heavy load. Use the tail end to make a stopper knot.

**Common uses:** Climbing and mountaineering; making a loop for a carabiner to attach a sled to a snowmobile.

### Bowline

The bowline is a loop knot that creates a closed, fixed circle at the end of a line. This is a secure knot that does not slip when loaded and is easy to untie. Learn to tie it with one hand for fun or for rescue situations. To tie a bowline, make a small loop, then with the running end of the rope, make the “rabbit come out of the hole, around the tree and back down the hole.” Use a stopper knot.

**Common uses:** Tying around a tent loop to use as a guyline; tying down cargo.

### Clove Hitch (aka Double Hitch)

The clove hitch is a great all-purpose hitch to secure a rope when pulled from a post in two directions. It consists of two half hitches around an object, with the running end then

passing under itself, making it a good binding knot. It is easy to untie but needs tension or will come undone. The clove hitch can be tied from the middle of the rope.

**Common uses:** Starting or ending lashing; attaching a rope to a carabiner, eye ring grommet, stake or post.

## Round Turn and Two Half Hitches

The round turn and two half hitches ties a rope to an object (e.g., post, ring). It is a great all-purpose knot to secure a rope when pulled from a post in one direction. It is strong, does not slip, and is easy to untie.

**Common uses:** Lowering survival bags from a ship's deck to a small boat below; securing survival bags to a bamboo or metal stake so they do not blow away.

## Sheepshank Knot

A sheepshank knot is used to shorten a rope or take up slack. It requires tension.

**Common uses:** When you need a short length of rope but do not want to cut the line.

## Sheet Bend

A sheet bend knot joins two ropes of different sizes or thicknesses. Use the thicker or more slippery rope as the bight, with the thinner rope going around it.

**Common uses:** Lengthening a guyline; fixing a boot lace with paracord or string; using scraps of line to make a longer one.

## Tautline Hitch

The tautline hitch is an adjustable loop knot that can slide on a line. It easily adjusts under tension and remains secure once the knot is pulled tight. This knot is a combination of the clove hitch and the round turn and two half hitches.

**Common uses:** Replacing a tent guyline; adjusting the tension on a guyline.

## Square Knot (aka Reef Knot)

The square knot is a binding knot used to tie two ends of a single rope together, right over left, then left over right.

**Common uses:** Lengthening a rope by tying two lines together; tying a bundle of bamboo poles; tying bandages.

## Prusik Knot

The Prusik knot is a friction hitch used to attach a loop of 5-millimeter cord around a rope.

**Common uses:** Climbing and mountaineering; tying items to a guyline so they do not blow away.

## Trucker's Hitch

The trucker's hitch stretches a rope between two anchor points. It is essentially a block and tackle knot that uses mechanical advantage and friction. Form the loop with the slack part of the line so it does not tension on itself. It can quickly be undone and retensioned, with more force than the tautline hitch.

**Common uses:** Tensioning guylines between deadman anchors and the tent; tying and securing sled loads.

## Water Knot

The water knot joins two lengths of webbing or straps.

**Common uses:** Lengthening two pieces of webbing; joining two cargo straps or cam straps.

## Double Fisherman's Stopper

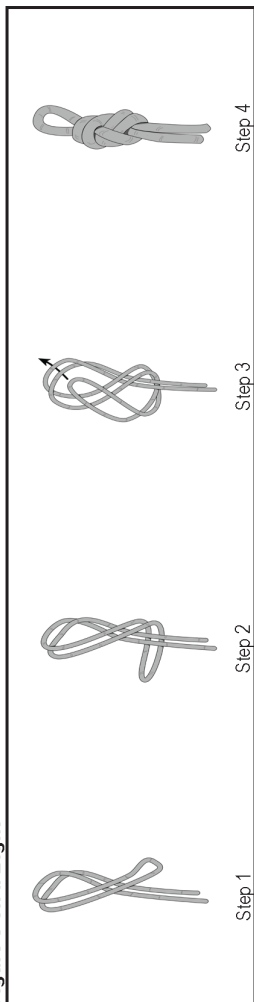
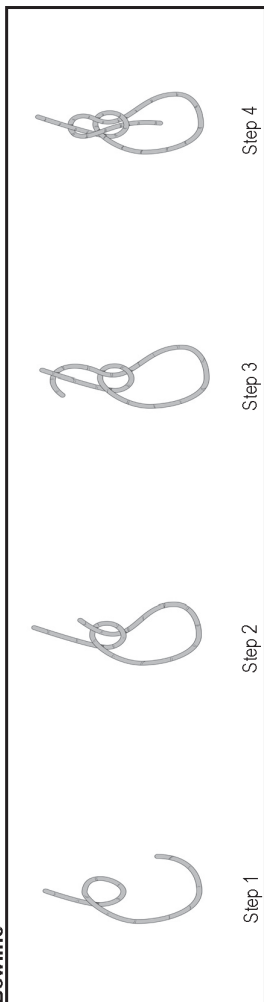
The double fisherman's stopper knot joins two lengths of rope and is very easy to tie. It consists of two overhand knots.

**Common uses:** Making slings in climbing; making adjustable necklaces and bracelets; camping crafts on bad-weather days.

## Alpine Butterfly Loop

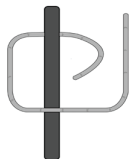
The alpine butterfly forms a fixed loop in the middle of a rope without needing access to either end. This knot shortens a long climbing rope or creates a bight in the middle of a rope.

**Common uses:** Connecting members of a roped-up mountaineering team.

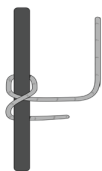
**Figure 8 on a Bight****Bowline**

Note: Illustrated by GHG.

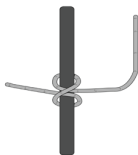
### Clove Hitch (Double Hitch)



Step 1



Step 2



Step 3



Step 4

### Round Turn and Two Half Hitches



Step 1



Step 2

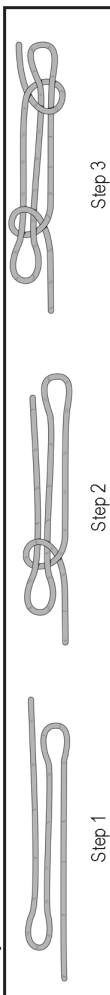
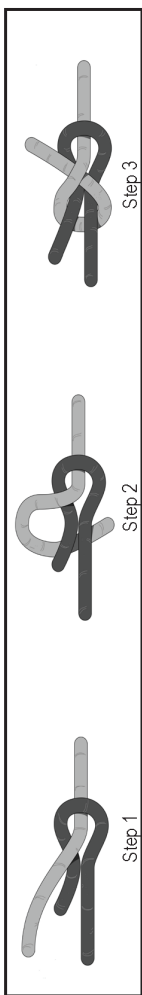
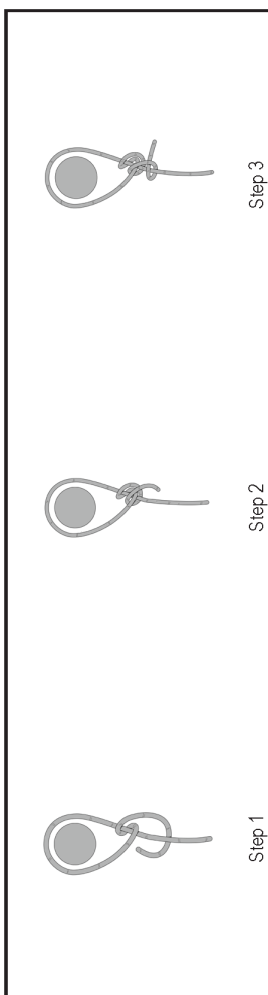


Step 3



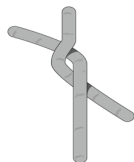
Step 4

Note: Illustrated by GHG.

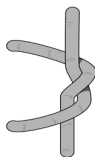
**Sheepshank Knot****Sheet Bend****Tautline Hitch**

Note: Illustrated by GHG.

## Square Knot or Reef Knot



Step 1



Step 2



Step 3

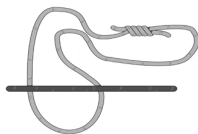


Step 4

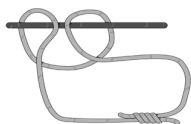


Step 5

## Prusik Knot



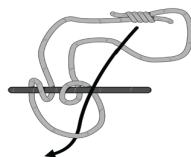
Step 1



Step 2



Step 3



Step 4



Step 5

Note: Illustrated by GHG.

**Trucker's Hitch**

Step 1



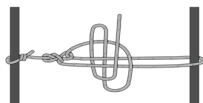
Step 2



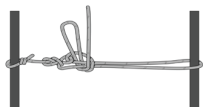
Step 3



Step 4



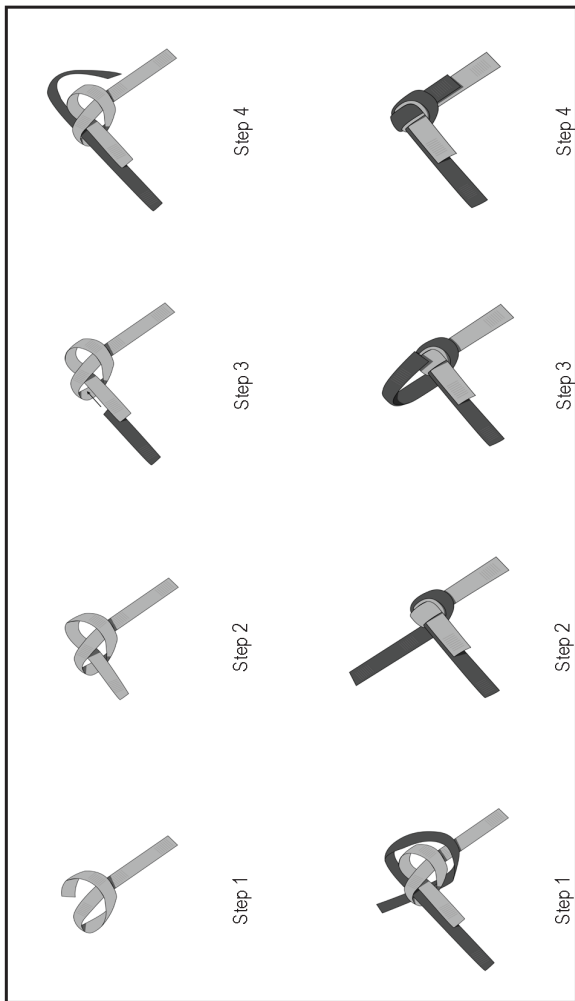
Step 5



Step 6

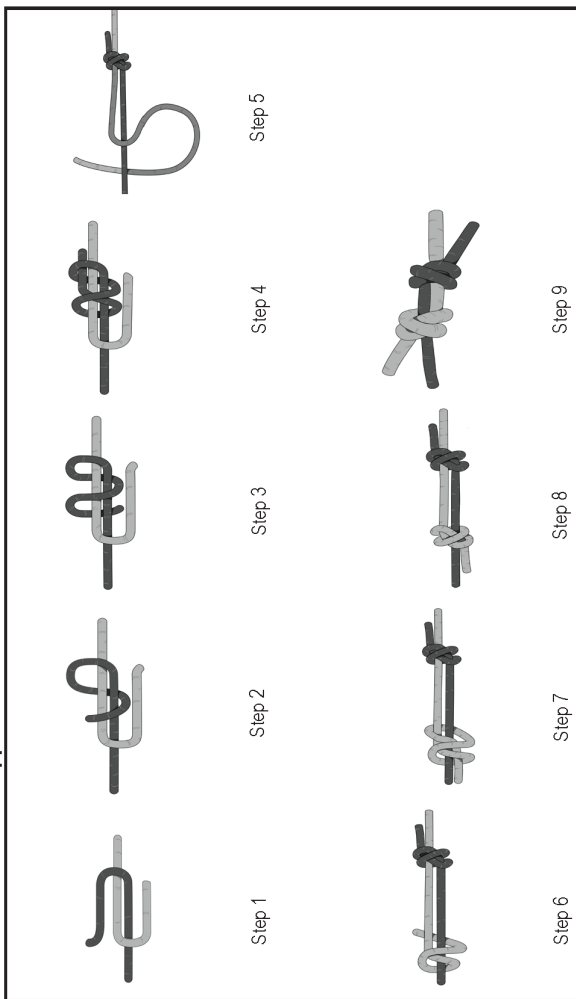
Note: Illustrated by GHG.

# Water Knot



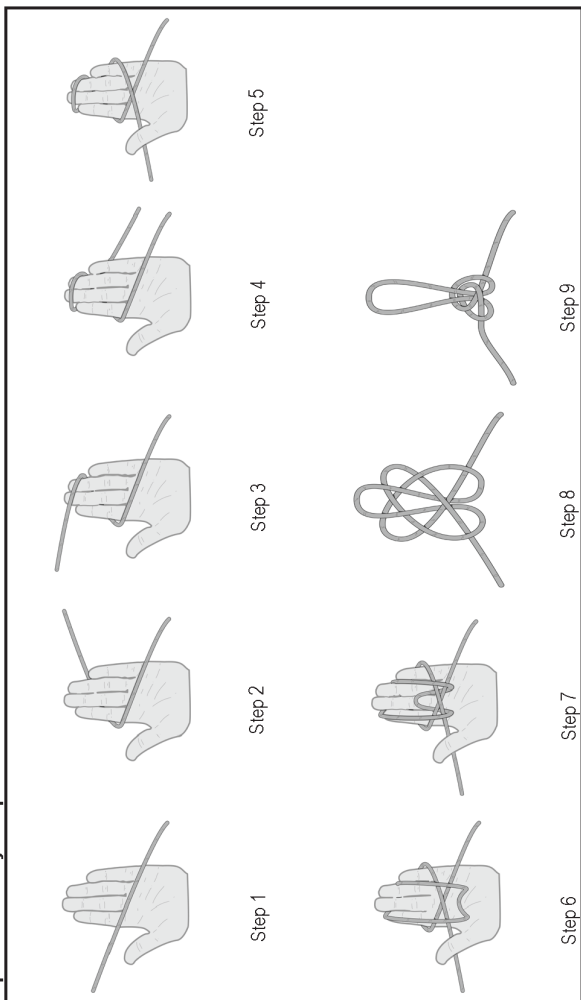
Note: Illustrated by GHG.

## Double Fisherman's Stopper



Note: Illustrated by GHG.

## Alpine Butterfly Loop



Note: Illustrated by GHG.

## Common Conversions of Measure

| Measure  | Multiply       | By      | To Get         |
|----------|----------------|---------|----------------|
| Weight   | pounds         | 0.4536  | kilograms      |
|          | kilograms      | 2.2046  | pounds         |
| Distance | inches         | 25.4000 | millimeters    |
|          | millimeters    | 0.0394  | inches         |
|          | inches         | 2.5400  | centimeters    |
|          | centimeters    | 0.3937  | inches         |
|          | meters         | 3.2808  | feet           |
|          | feet           | 0.3048  | meters         |
|          | meters         | 1.0936  | yards          |
|          | yards          | 0.9144  | meters         |
|          | kilometers     | 0.6214  | miles          |
|          | miles          | 1.6090  | kilometers     |
|          | kilometers     | 0.5396  | nautical miles |
|          | nautical miles | 1.8530  | kilometers     |
|          | statute miles  | 1.6093  | kilometers     |
|          | kilometers     | 0.6213  | statute miles  |
| Density  | cubic feet     | 0.0283  | cubic meters   |
|          | cubic meters   | 35.3145 | cubic yards    |
|          | cubic yards    | 0.7646  | cubic meters   |
|          | cubic meters   | 1.3079  | cubic yards    |
| Volume   | liters         | 0.2642  | gallons        |
|          | gallons        | 3.7854  | liters         |
|          | liters         | 2.1134  | pint (liquid)  |
|          | pint (liquid)  | 0.4732  | liters         |

# New Zealand Daylight Savings Time – Zulu Time Conversions

| NZDT  | Zulu  | NZDT  | Zulu  |
|-------|-------|-------|-------|
| 00:00 | 11:00 | 12:00 | 23:00 |
| 00:30 | 11:30 | 12:30 | 23:30 |
| 01:00 | 12:00 | 13:00 | 00:00 |
| 01:30 | 12:30 | 13:30 | 00:30 |
| 02:00 | 13:00 | 14:00 | 01:00 |
| 02:30 | 13:30 | 14:30 | 01:30 |
| 03:00 | 14:00 | 15:00 | 02:00 |
| 03:30 | 14:30 | 15:30 | 02:30 |
| 04:00 | 15:00 | 16:00 | 03:00 |
| 04:30 | 15:30 | 16:30 | 03:30 |
| 05:00 | 16:00 | 17:00 | 04:00 |
| 05:30 | 16:30 | 17:30 | 04:30 |
| 06:00 | 17:00 | 18:00 | 05:00 |
| 06:30 | 17:30 | 18:30 | 05:30 |
| 07:00 | 18:00 | 19:00 | 06:00 |
| 07:30 | 18:30 | 19:30 | 06:30 |
| 08:00 | 19:00 | 20:00 | 07:00 |
| 08:30 | 19:30 | 20:30 | 07:30 |
| 09:00 | 20:00 | 21:00 | 08:00 |
| 09:30 | 20:30 | 21:30 | 08:30 |
| 10:00 | 21:00 | 22:00 | 09:00 |
| 10:30 | 21:30 | 22:30 | 09:30 |

| NZDT  | Zulu  | NZDT  | Zulu  |
|-------|-------|-------|-------|
| 11:00 | 22:00 | 23:00 | 10:00 |
| 11:30 | 22:30 | 23:30 | 10:30 |

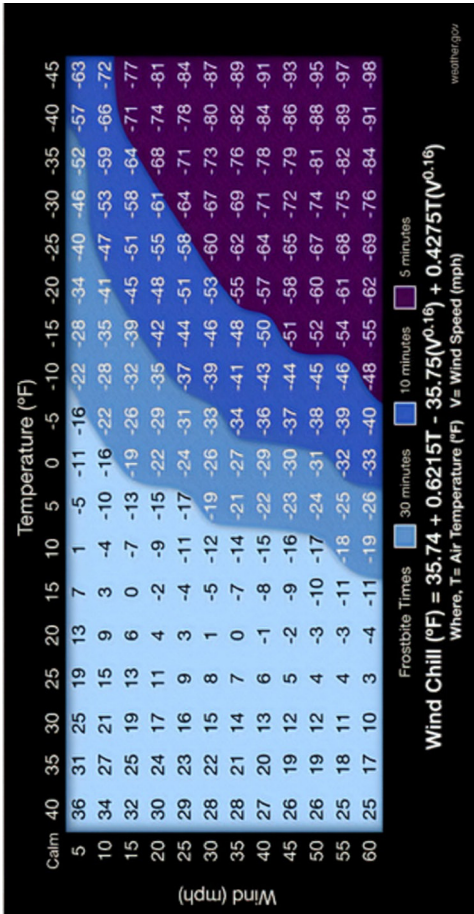
Note: NZDT = New Zealand Daylight Savings Time. Report weather observations in Zulu time (e.g., a McMurdo-based field camp operating on NZDT in the austral summer with an 08:00 weather observation calls it in as 19:00 Zulu).

## Temperature Conversions

| Degrees Fahrenheit (°F) | Degrees Celsius (°C) |
|-------------------------|----------------------|
| 40                      | 4.4                  |
| 35                      | 1.7                  |
| 32                      | 0.0                  |
| 30                      | -1.1                 |
| 25                      | -3.9                 |
| 20                      | -6.7                 |
| 15                      | -9.4                 |
| 10                      | -12.2                |
| 5                       | -15.0                |
| 0                       | -17.8                |
| -5                      | -20.6                |
| -10                     | -23.3                |
| -15                     | -26.1                |
| -20                     | -28.9                |
| -25                     | -31.7                |
| -30                     | -34.4                |
| -35                     | -37.2                |
| -40                     | -40.0                |

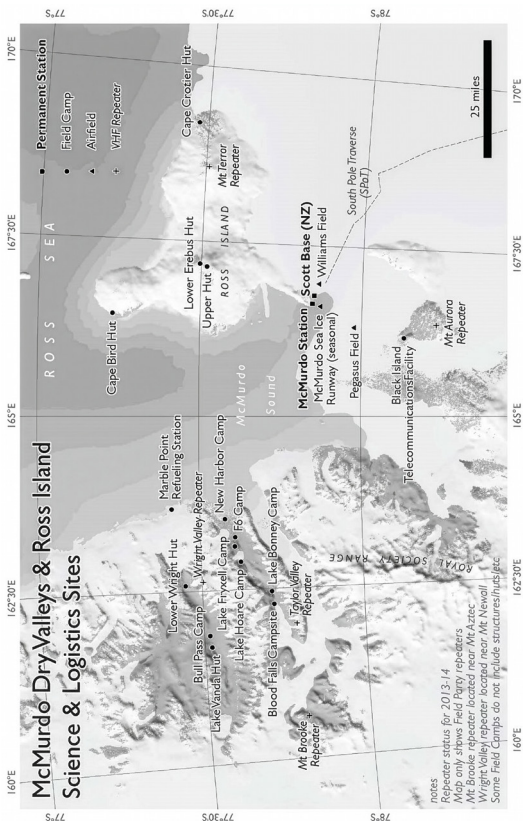
Note: Fahrenheit to Celsius = (Fahrenheit – 32) × (5/9). Celsius to Fahrenheit = (1.8 × Celsius) + 32.

# Wind Chill Chart



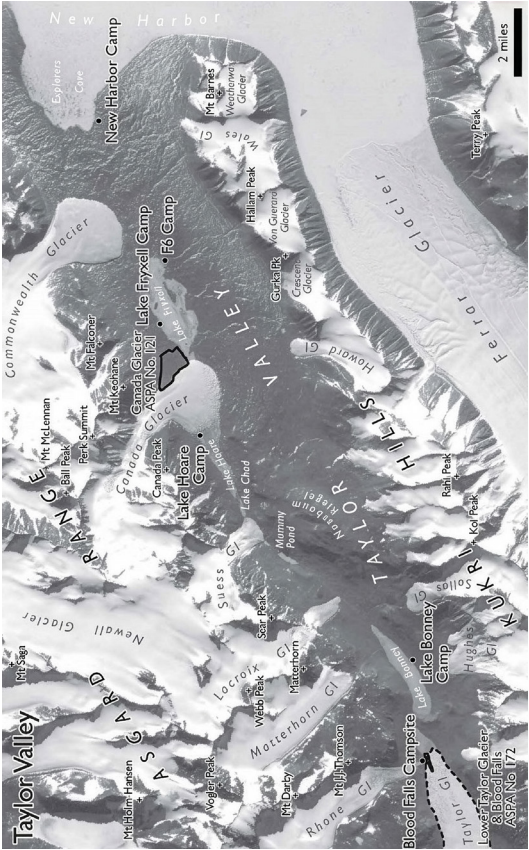
Note: Reproduced from “Understanding Wind Chill,” National Weather Service, <https://www.weather.gov/safety/cold-wind-chill-chart>.

## McMurdo Dry Valleys and Ross Island Science Logistics Sites



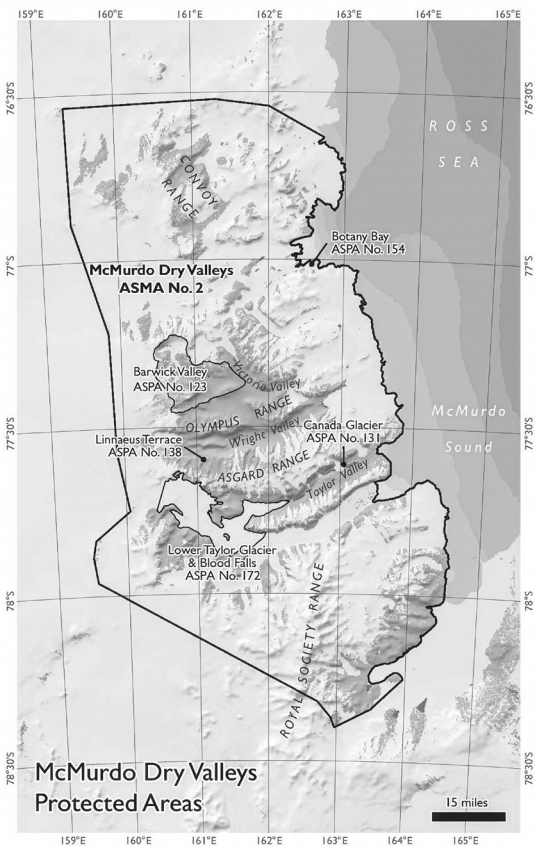
Note: Produced by Polar Geospatial Center (<https://www.pgc.umn.edu>), based on data from USAP's Environmental Research & Assessment, Antarctic Digital Database.

# Taylor Valley Camps



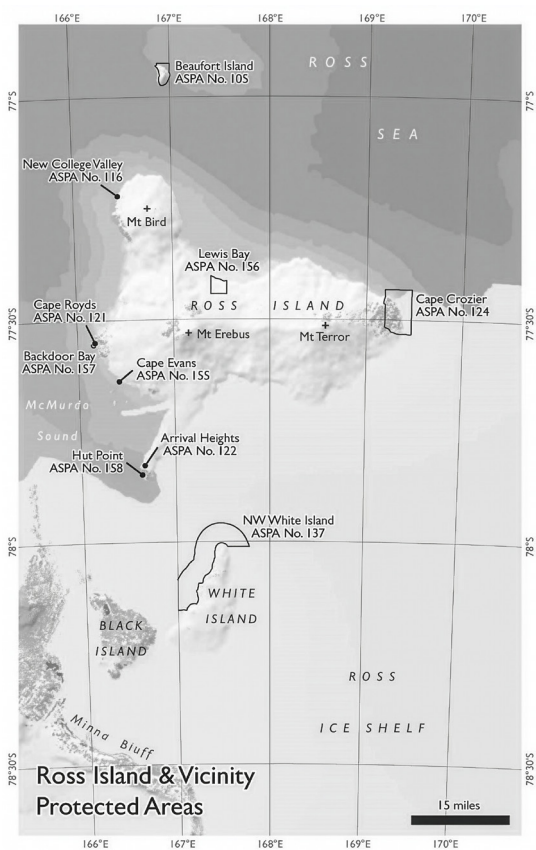
Note: Produced by Polar Geospatial Center (<https://www.pgc.umn.edu>), based on data from USAP's Environmental Research & Assessment, Antarctic Digital Database.

# McMurdo Dry Valleys ASMA



Note: Produced by Polar Geospatial Center (<https://www.pgc.umn.edu>), based on data from USAP's Environmental Research & Assessment, Antarctic Digital Database.

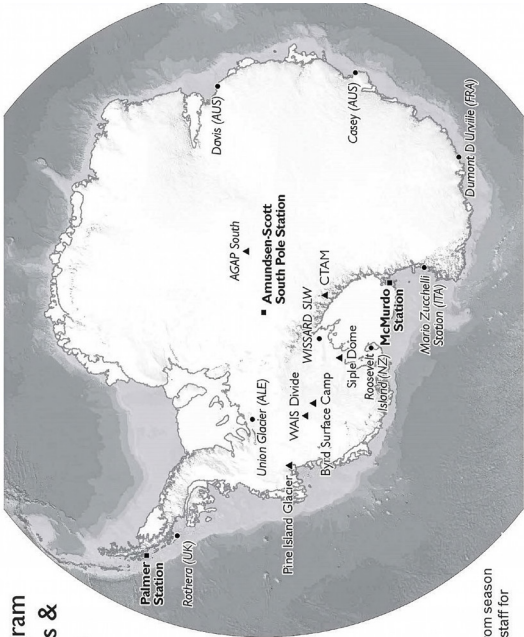
# Ross Island and Vicinity ASPAs



Note: Produced by Polar Geospatial Center (<https://www.pgc.umn.edu>), based on data from USAP's Environmental Research & Assessment, Antarctic Digital Database.

# U.S. Antarctic Program Permanent Stations & Deep Field Camps

- Permanent U.S. Station
- ▲ Deep Field Camp
- Other USAP or International Site



Note. Deep-field camps change from season to season. Contact Field Support staff for current locations

Note: Produced by Polar Geospatial Center (<https://www.pgc.umn.edu>), based on data from USAP's Environmental Research & Assessment, Antarctic Digital Database.

## Glossary

The following terms are used in this manual.

| Term                             | Definition                                                   |
|----------------------------------|--------------------------------------------------------------|
| AC                               | alternating current                                          |
| ACA                              | Antarctic Conservation Act                                   |
| ACL                              | allowable cabin load                                         |
| AF Form 3803                     | U.S. Air Force form for recording weather observations       |
| AFS                              | Antarctic Field Safety                                       |
| AGE                              | Aerospace Ground Equipment                                   |
| ANG                              | Air National Guard                                           |
| Antarctic-Environmental Protocol | Protocol on Environmental Protection to the Antarctic Treaty |
| ASC                              | Antarctic Support Contract                                   |
| ASMA                             | Antarctic Specially Managed Area                             |
| ASPA                             | Antarctic Specially Protected Area                           |
| AvOps                            | Aviation Operations                                          |
| BFC                              | Berg Field Center                                            |
| BL                               | Building                                                     |
| Central Comms                    | Central Communications                                       |
| CMO                              | chief medical officer                                        |
| CO                               | carbon monoxide                                              |
| COC                              | chain of custody                                             |
| Crary Lab                        | Crary Science and Engineering Center                         |
| DC                               | direct current                                               |
| DID                              | direct inward dialing                                        |
| DNF                              | do not freeze                                                |
| ECW                              | extreme cold weather                                         |

| Term      | Definition                                |
|-----------|-------------------------------------------|
| EOC       | Emergency Operations Center               |
| EOS       | end of season                             |
| ETA       | estimated time of arrival                 |
| ETR       | estimated time of return                  |
| Fleet Ops | Fleet Operations                          |
| FP        | field party                               |
| FS&T      | Field Support & Training                  |
| FTS       | Federal Telephone System                  |
| GPS       | global positioning system                 |
| haz dec   | Shipper's Declaration for Dangerous Goods |
| Helo Ops  | Helicopter Operations                     |
| helo pad  | helicopter pad                            |
| helo tech | helicopter technician                     |
| HELOFF    | helicopter flight following               |
| HF        | high frequency                            |
| HPAI      | highly pathogenic avian influenza         |
| HSMs      | Historic Sites and Monuments              |
| IT        | information technology                    |
| JSART     | joint search and rescue team              |
| KBA       | Kenn Borek Air, Ltd.                      |
| KC        | keep chilled                              |
| KF        | keep frozen                               |
| KU        | keep upright                              |
| lb        | pounds                                    |
| LDBF      | Long Duration Balloon Facility            |
| MacCenter | McMurdo Station Field Operations Center   |
| MacOps    | McMurdo Station Operations                |

| Term       | Definition                                                                                  |
|------------|---------------------------------------------------------------------------------------------|
| MacWeather | McMurdo Weather                                                                             |
| MCC        | Movement Control Center                                                                     |
| MEC        | Mechanical Equipment Center                                                                 |
| medevac    | medical evacuation                                                                          |
| MERM       | medical and emergency response manager                                                      |
| METAR      | aviation routine weather report                                                             |
| MHz        | megahertz                                                                                   |
| MoGas      | motor vehicle gasoline                                                                      |
| mpg        | miles per gallon                                                                            |
| mph        | miles per hour                                                                              |
| MRE        | Meal, Ready-to-Eat                                                                          |
| NIWC       | Naval Information Warfare Center Atlantic                                                   |
| NSF        | U.S. National Science Foundation                                                            |
| NYANG      | New York Air National Guard                                                                 |
| OPP        | Office of Polar Programs                                                                    |
| PADS       | Public Area Display System                                                                  |
| PI         | principal investigator                                                                      |
| PIREP      | pilot report                                                                                |
| POC        | point of contact                                                                            |
| Premix     | Usually a 50:1 mixture of MoGas to “Blizzard” oil used by snowmobiles and similar equipment |
| PVC        | polyvinyl chloride                                                                          |
| recce      | reconnaissance flight                                                                       |
| retro      | retrograde                                                                                  |
| RFI        | ready for issue                                                                             |
| RM         | risk management                                                                             |
| RSP        | Research Support Plan                                                                       |

| Term    | Definition                                            |
|---------|-------------------------------------------------------|
| SAHPR   | Sexual Assault and Harassment Prevention and Response |
| SAR     | search and rescue                                     |
| SIP     | Support Information Package                           |
| SOAP    | subjective, objective, assessment, and plan           |
| SPECI   | aviation special weather report                       |
| SSC     | Science Support Center                                |
| TAF     | Terminal Aerodrome Forecast                           |
| triwall | triple-layered, corrugated paperboard box             |
| UHF     | ultra high frequency                                  |
| UHMW    | ultra high molecular weight                           |
| USAP    | United States Antarctic Program                       |
| VHF     | very high frequency                                   |
| VoIP    | Voice over Internet Protocol                          |
| WAIS    | West Antarctic Ice Sheet                              |

