REFERENCES

SOAP Note

SOAP NOTE

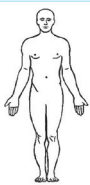
Patient Name		DOB	

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
			/			
			/			
			/			
			/			
			/			
			/			
			/			

ASSESSMENT AND TREATMENT PLAN	
A = Assessment (Problem List)	P = Treatment Plan

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?	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ 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?	☐ Y ☐ N	**If Yes, Fluid Type (e.g., Fuel, Glycol)**	
Related Injuries?	(Specify in Injury or Illness section)		
Fire or Risk of Fire?	☐ Y ☐ N		
Volume of Spill (Gallons)	_____ Gallons		
Dimensions of Spill Area			

LOSS OF SHELTER OR INFRASTRUCTURE	
Shelter(s) Available (Type and Quantity)	
Already Set up?	☐ Y ☐ N
Fire?	☐ Y ☐ N
Related Injuries?	(Specify in Injury or Illness section)
Food Available? (Estimate Person-Days)	☐ Y ☐ N _____ Person-Days
Fuel Available? (Cooking + Heating; Estimate Days)	☐ Y ☐ N _____ Days
Comms, Power, Batteries?	☐ Y ☐ N

AIRCRAFT MISHAP	
Aircraft Type and Call Sign	
Related Injuries?	(Specify in Injury or Illness section)
Crew Status	
Aircraft Engine/Prop/Rotor Still Running?	☐ Y ☐ N
Fire or Risk of Fire?	☐ Y ☐ 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?	☐ Y ☐ N
Fire or Risk of Fire?	☐ Y ☐ N

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.

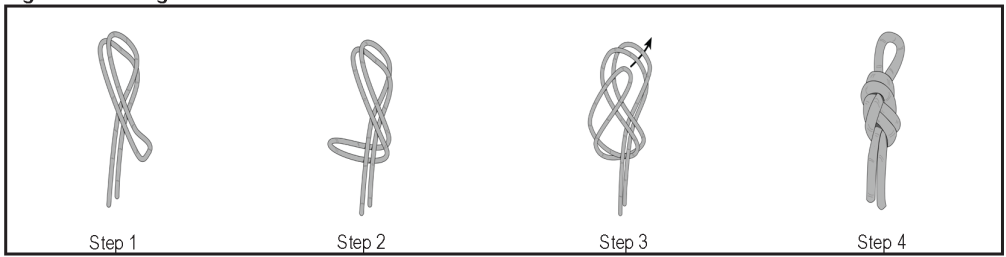
Alpine Butterfly Loop

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.

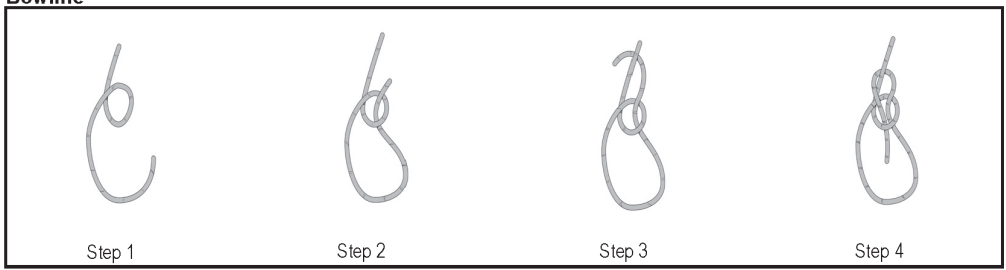
Common uses: Connecting members of a roped-up mountaineering team.

Note: Illustrated by GHG.

Figure 8 on a Bight

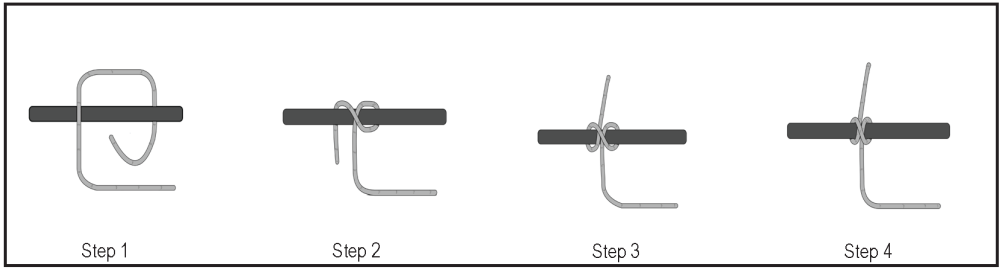


Bowline

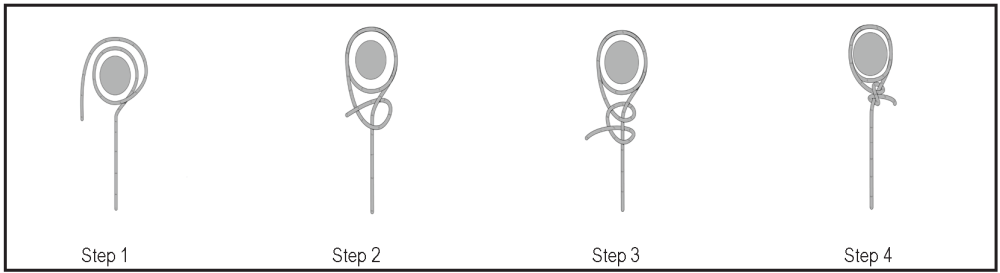


Note: Illustrated by GHG.

Clove Hitch (Double Hitch)

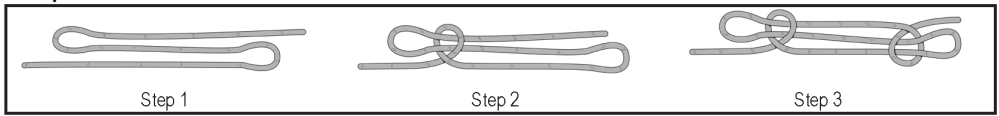


Round Turn and Two Half Hitches

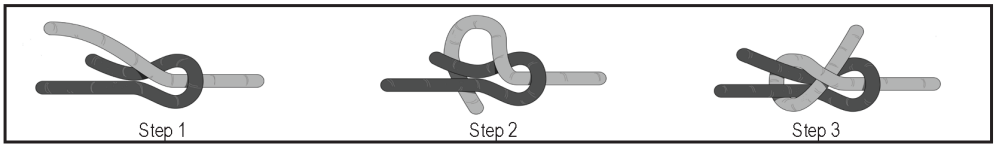


Note: Illustrated by GHG.

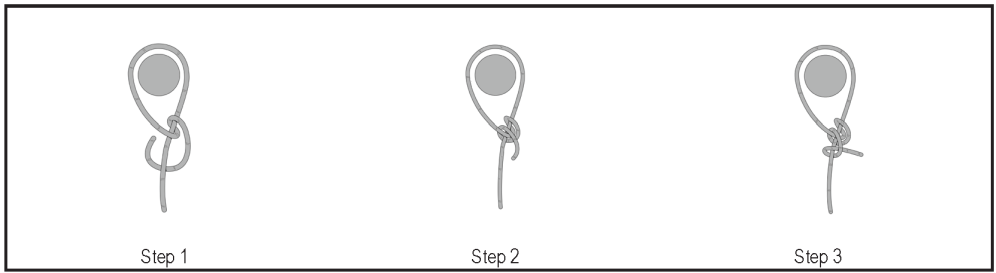
Sheepshank Knot



Sheet Bend

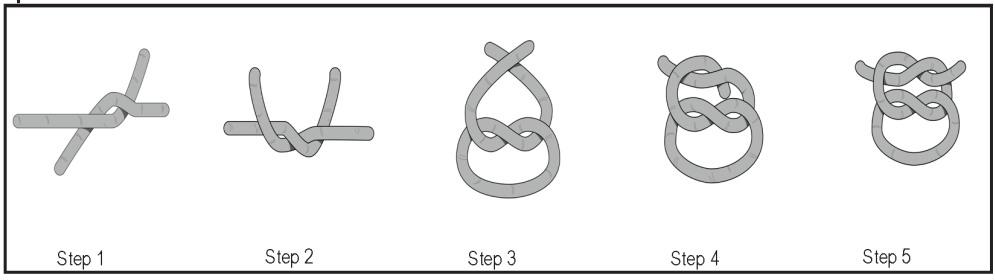


Tautline Hitch

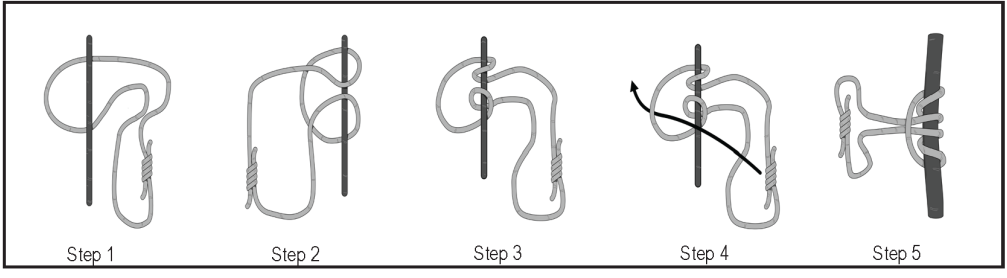


Note: Illustrated by GHG.

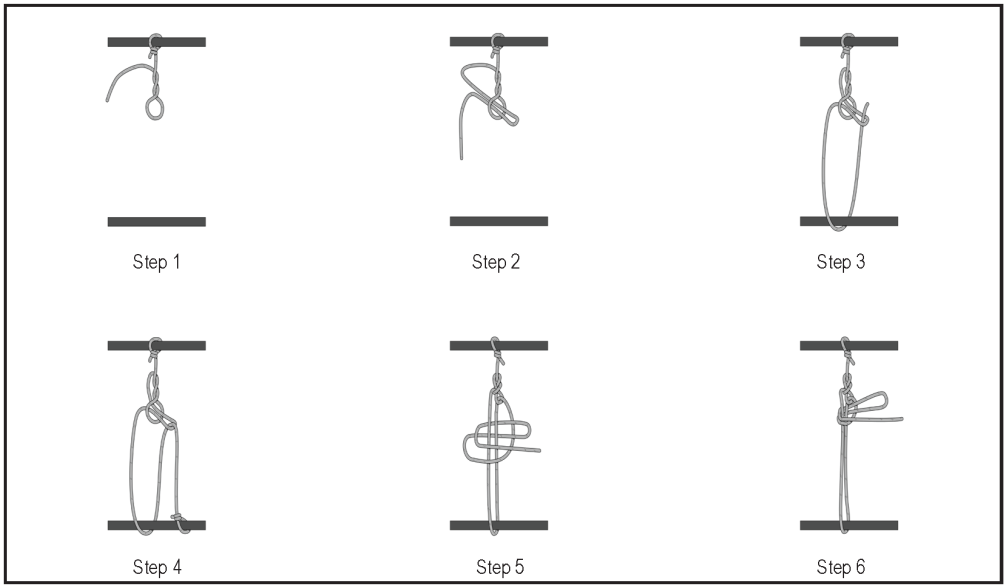
Square Knot or Reef Knot



Prusik Knot



Trucker's Hitch



Note: Illustrated by GHG.

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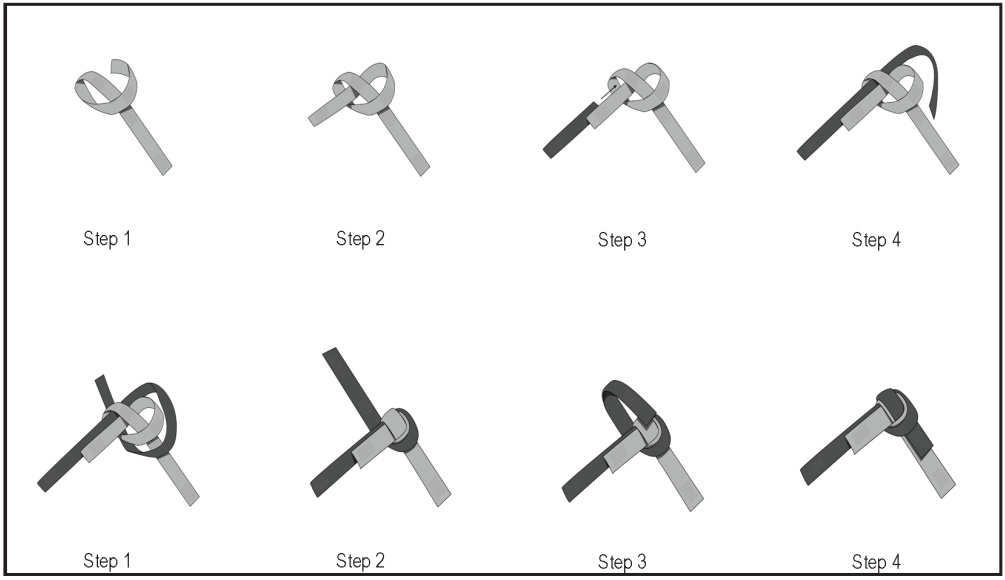
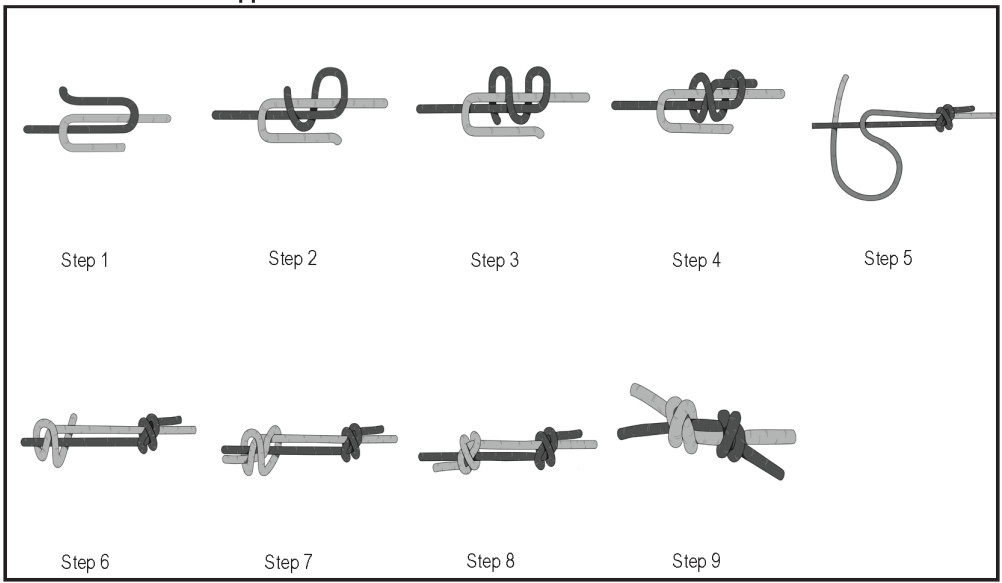
Water Knot



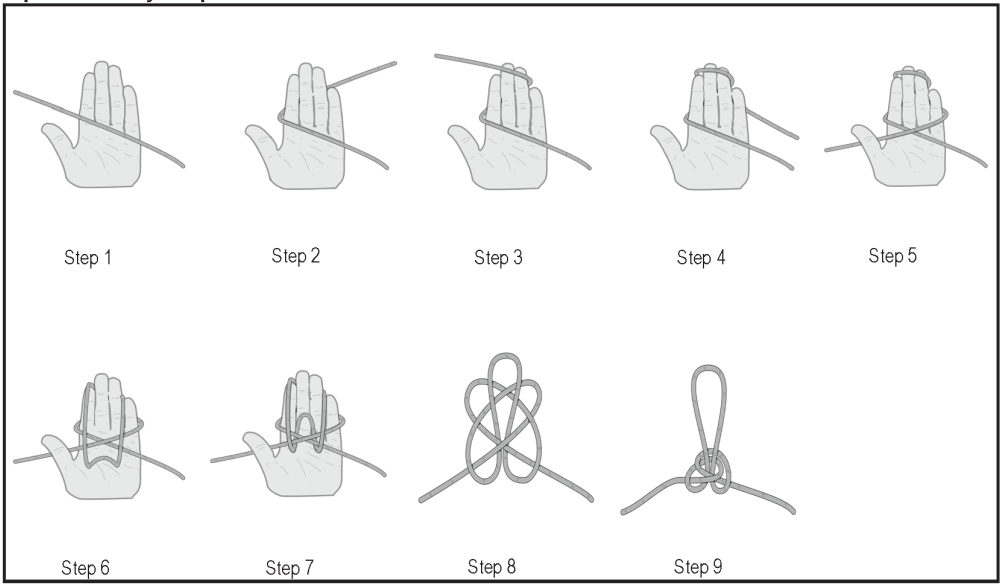
Note: Illustrated by GHG.

Double Fisherman's Stopper



Note: Illustrated by GHG.

Alpine Butterfly Loop



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

Chilean Standard Time – Zulu Time Conversions

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

CLT	Zulu	CLT	Zulu
11:00	14:00	23:00	02:00
11:30	14:30	23:30	02:30

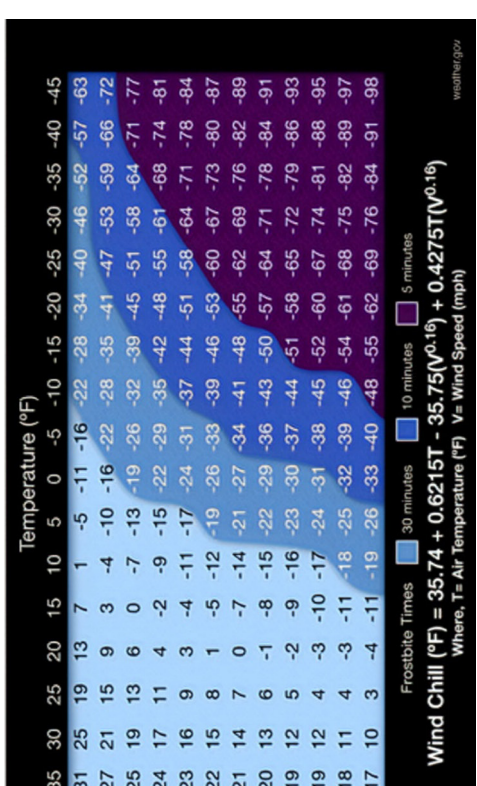
Note: CLT = Chilean Standard Time. Report weather observations in Zulu time (e.g., a Peninsula field camp operating on CLT in the austral summer with an 08:00 weather observation calls it in as 11:00 Zulu).

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.

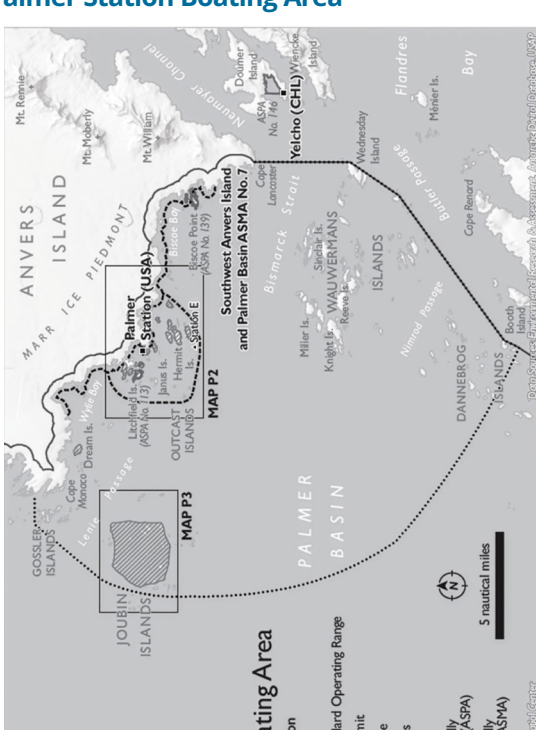
Wind Chill Chart



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

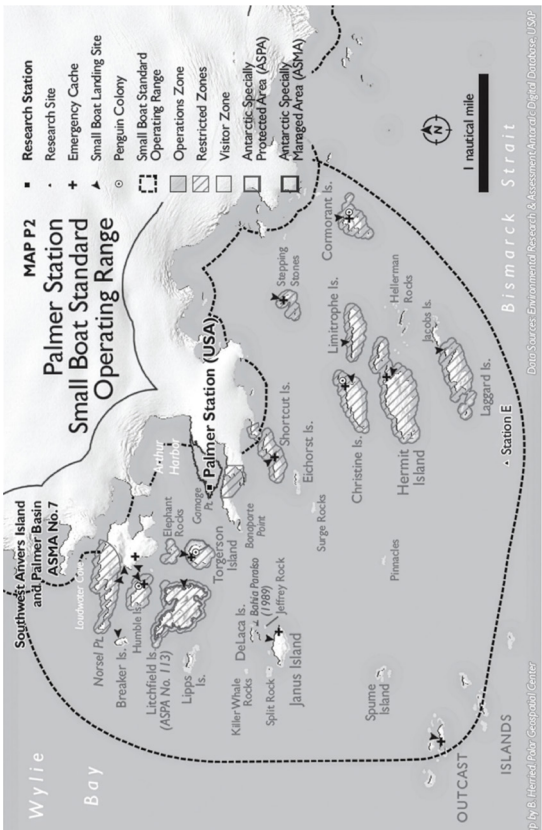
Maps

Palmer Station Boating Area



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

Palmer Station Small-Boat Operating Range



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

Joubin Islands

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

Glossary

For a glossary of helpful nautical terms, visit https://www.marinewaypoints.com/learn/glossary/glossary.shtml. The following terms are used in this manual.

Term	Definition
2WD	two-wheel drive
4WD	four-wheel drive
AC	alternating current
ACA	Antarctic Conservation Act of 1978
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
ATV	all-terrain vehicle
BTU	British thermal unit
Central Comms	Central Communications
CO	carbon monoxide
DC	direct current
ECW	extreme cold weather
EOS	end of season
GPS	global positioning system
HF	high frequency
HPAI	highly pathogenic avian influenza
HSMs	Historic Sites and Monuments
IATA	International Air Transportation Association
IMDG	International Maritime Dangerous Goods
Maximo	Software that manages the USAP cargo system

Term	Definition
MEC	Mechanical Equipment Center
medevac	medical evacuation
MHz	megahertz
MoGas	motor vehicle gas
mpg	miles per gallon
NIWC	Naval Information Warfare Center Atlantic
NSF	U.S. National Science Foundation
OPP	Office of Polar Programs
OSAR	ocean search and rescue
PI	principal investigator
POC	point of contact
PVC	polyvinyl chloride
RFI	ready for issue
RHIB	rigid hull inflatable boat
RM	risk management
RSP	Research Support Plan
SAR	search and rescue
SDS	safety data sheet
SIP	Support Information Package
SN	shipping number
SOAP	subjective, objective, assessment, and plan
T&L	Transportation & Logistics
UHMW	ultra high molecular weight
USAP	United States Antarctic Program
VHF	very high frequency


Antarctic Circle
Palmer Station
South Pole Station
McMurdo Station