# <u>Digital gold star cadet lesson EO M425.03 develop an expedition</u> <u>equipment list</u>

Created by: Sgt, O'Handley

Date: 2020/04/05

## Lesson Introduction

The objective of the lesson EO M425.03 is to the cadet with enough important and relative information to prepare them.

The lesson is important as every cadet will at least once be provided an opportunity to prepare their very own kit for an expedition activity whether it be an ftx a day hike or any other form of an expedition outing. This lesson is important as every expedition activity has its own challenges and difficulties and requires its own unique equipment to overcome these.

The lesson is composed of four parts and a confirmation activity. Teaching Point A, Fuel and Food Consumption. Teaching Point B, Personal Kit. Teaching Point C, Group Equipment. Teaching Point D, Activity Specific Equipment. The lesson should be followed in this order for maximum clarity.

# Teaching Point A, Fuel and food Consumption

In this teaching point we will discuss how much fuel and food will be required to sustain an individual or group for a determined period of time.

### Fuel

For fuel consumption we will be looking at how much fuel is required for a group or individual to cook three MRE's a day. The equations below will show you how to calculate fuel consumption.

(The fuel approximation is based on a Coleman peak single burner stove)

fuel per person and time duration per season

#### <u>Summer</u>

1 person for one day uses approximately 5.5 ounces of fuel

You can multiply this number by the amount of days you will be staying for an estimate of the fuel that will be required.

 $5.5 \times 2 = 11$ 

So you will need 11 ounces of fuel for 2 days.

3 people for one day use approximately 11 ounces of fuel

You can multiply this number by the amount of days you will be staying for an estimate of the fuel that will be required.

 $11 \times 2 = 22$ 

So you will need 22 ounces of fuel for 2 days.

#### Fall/Spring

1 person for one day uses approximately 8.5 ounces of fuel

You can multiply this number by the amount of days you will be staying for an estimate of the fuel that will be required.

 $8.5 \times 2 = 17$ 

So you will need 17 ounces of fuel for 2 days.

3 people for one day use approximately 11 ounces of fuel

You can multiply this number by the amount of days you will be staying for an estimate of the fuel that will be required.

 $17 \times 2 = 34$ 

So you will need 34 ounces of fuel for 2 days.

#### Winter

1 person for one day uses approximately 17 ounces of fuel

You can multiply this number by the amount of days you will be staying for an estimate of the fuel that will be required.

 $17 \times 2 = 34$ 

So you will need 34 ounces of fuel for 2 days.

3 people for one day use approximately 25.5 ounces of fuel

You can multiply this number by the amount of days you will be staying for an estimate of the fuel that will be required.

 $25.5 \times 2 = 51$ 

So you will need 51 ounces of fuel for 2 days.

## Food

For food consumption we will look at the average amount of food to sustain cadets for a determined amount of time.

The average cadet requires three MRE packages to maintain a proper diet we can use this number to determine how many are required for a set amount of people and time in the following equation.

3 X the amount of people attending X Amount of days attending = Food required

The following equation is for three people for five days.

 $3 \times 3 \times 5 = 45$ 

This equation shows you will need 45 mre packages for three people for five days.

# Teaching Point B, Personal Kit

In this teaching point we will be discussing the personal kit required for a typical expedition. It will be broken up into issues and brought to the kit. The kit in this section only the cadet who brought it or was issued it is responsible for it. Only pack as need as you will be carrying the load.

## Issued (Not limited to list)

Tooliou (1101 minitou to not)	
Sleeping Bag + Liner	All seasons
Hiking Pack	All seasons
Velice	All seasons
Snow Shoes	Winter maybe early spring and fall
Mukluks	Winter maybe early spring and fall
Thick winter gloves	Winter maybe early spring and fall
flashlight/ headlamp	All seasons
Mess kit	All seasons
whistle	All seasons
Ground pad	All seasons
Trekking poles	All seasons

<sup>\*</sup>Note as to knives only silver stars and higher are allowed to carry a six inch folding knife not assisted or straight blade.

# Brought (Not limited to list)

T-shirts or quick-dry shirts  FTU's or suitable civis  Cadet Socks or suitable civis  All seasons  Underwear  All seasons  Sweaters  All seasons  All seasons  All seasons  Cadet Combat boots or suitable civis hiking boots  Hat (wide brim tilly or baseball cap) or wither cap  Sunglasses  All seasons  All seasons  All seasons  All seasons  Cadet issued gloves  All seasons  Notepad and pencil  All seasons  Flashlight/ headlamp  All seasons  Face cloth or small hand towel  Lip balm  All seasons  Cadet issued parka  Winter maybe early spring  Mater bottle Nalgene preferably.  A seaf or other winter accessories  Winter maybe early spring  Winter maybe early spring	,	
Cadet Socks or suitable civis  Underwear  All seasons  All seasons  All seasons  All seasons  Cadet Combat boots or suitable civis hiking boots  Hat (wide brim tilly or baseball cap) or wither cap  Sunglasses  All seasons  Sunscreen not aerosol  Cadet issued gloves  All seasons  Notepad and pencil  Flashlight/ headlamp  Soap  All seasons  All seasons  All seasons  All seasons  All seasons  All seasons  Cadet issued gloves  All seasons  All seasons  Cadet issued gloves  All seasons  All seasons  Cadet issued parka  All seasons  Cadet issued parka  Winter maybe early spring  Mater bottle Nalgene preferably.  Mug  All seasons  Winter maybe early spring  Minter maybe early spring	T-shirts or quick-dry shirts	All seasons
Underwear  Sweaters  All seasons  All seasons  Cadet Combat boots or suitable civis hiking boots  Hat (wide brim tilly or baseball cap) or wither cap  Sunglasses  All seasons  All seasons  Sunscreen not aerosol  Cadet issued gloves  All seasons  Notepad and pencil  Flashlight/ headlamp  All seasons  Face cloth or small hand towel  Lip balm  Rain gear  All seasons  Cadet issued parka  Toothbrush + past  Water bottle Nalgene preferably.  mug  All seasons  Winter maybe early spring  Toothbrush + past  Water bottle Nalgene preferably.  Mil seasons  Winter maybe early spring  Minter maybe early spring	FTU's or suitable civis	All seasons
sweaters  Cadet Combat boots or suitable civis hiking boots  Hat (wide brim tilly or baseball cap) or wither cap  Sunglasses  All seasons  Sunscreen not aerosol  Cadet issued gloves  All seasons  Notepad and pencil  Flashlight/ headlamp  All seasons  Face cloth or small hand towel  Lip balm  Rain gear  Cadet issued parka  Toothbrush + past  Water bottle Nalgene preferably.  All seasons  Water bottle Nalgene preferably.  All seasons  Minter maybe early spring  Long underwear  Winter maybe early spring	Cadet Socks or suitable civis	All seasons
Cadet Combat boots or suitable civis hiking boots  Hat (wide brim tilly or baseball cap) or wither cap  Sunglasses  All seasons  Sunscreen not aerosol  Cadet issued gloves  All seasons  Notepad and pencil  Flashlight/ headlamp  soap  All seasons  All seasons  All seasons  All seasons  Face cloth or small hand towel  Lip balm  All seasons  Cadet issued parka  Winter maybe early spring  Toothbrush + past  Water bottle Nalgene preferably.  Mil seasons  All seasons  All seasons  All seasons  Winter maybe early spring  Mil seasons  Mil seasons  Winter maybe early spring  Mil seasons  Mil seasons  Water bottle Nalgene preferably.  Mil seasons  Winter maybe early spring  Mil seasons  Winter maybe early spring	Underwear	All seasons
hiking boots Hat (wide brim tilly or baseball cap) or wither cap  Sunglasses All seasons  Sunscreen not aerosol All seasons  Cadet issued gloves All seasons  Notepad and pencil All seasons  Flashlight/ headlamp All seasons  Face cloth or small hand towel All seasons  Lip balm All seasons  Rain gear All seasons  Cadet issued parka Winter maybe early spring  Toothbrush + past Water bottle Nalgene preferably.  Mil seasons  Long underwear  Winter maybe early spring  Winter maybe early spring	sweaters	All seasons
wither capSunglassesAll seasonsSunscreen not aerosolAll seasonsCadet issued glovesAll seasonsNotepad and pencilAll seasonsFlashlight/ headlampAll seasonssoapAll seasonsFace cloth or small hand towelAll seasonsLip balmAll seasonsRain gearAll seasonsCadet issued parkaWinter maybe early springToothbrush + pastAll seasonsWater bottle Nalgene preferably.All seasonsLong underwearWinter maybe early spring		All seasons
Sunscreen not aerosol  Cadet issued gloves  All seasons  Notepad and pencil  All seasons  Flashlight/ headlamp  All seasons  Soap  All seasons  Face cloth or small hand towel  Lip balm  All seasons  Rain gear  All seasons  Cadet issued parka  Winter maybe early spring  Toothbrush + past  Water bottle Nalgene preferably.  Mil seasons  All seasons  All seasons  Winter maybe early spring  All seasons  Water bottle Nalgene preferably.  Mil seasons  Mil seasons  Winter maybe early spring  Mil seasons  Winter maybe early spring	_ · · · · · · · · · · · · · · · · · · ·	All seasons
Cadet issued gloves  Notepad and pencil  All seasons  Flashlight/ headlamp  All seasons  soap  All seasons  Face cloth or small hand towel  Lip balm  All seasons  Rain gear  All seasons  Cadet issued parka  Winter maybe early spring  Toothbrush + past  Water bottle Nalgene preferably.  Mil seasons  All seasons  All seasons  All seasons  Water maybe early spring  Toothbrush + past  All seasons  Water bottle Nalgene preferably.  All seasons  Mug  All seasons  Winter maybe early spring	Sunglasses	All seasons
Notepad and pencil All seasons Flashlight/ headlamp All seasons soap All seasons Face cloth or small hand towel Lip balm All seasons Rain gear All seasons Cadet issued parka Winter maybe early spring Toothbrush + past Water bottle Nalgene preferably. All seasons All seasons Water underwear Winter maybe early spring Winter maybe early spring	Sunscreen not aerosol	All seasons
Flashlight/ headlamp All seasons  soap All seasons  Face cloth or small hand towel All seasons  Lip balm All seasons  Rain gear All seasons  Cadet issued parka Winter maybe early spring  Toothbrush + past All seasons  Water bottle Nalgene preferably. All seasons  mug All seasons  Long underwear Winter maybe early spring  Winter maybe early spring	Cadet issued gloves	All seasons
soap All seasons Face cloth or small hand towel All seasons Lip balm All seasons Rain gear All seasons Cadet issued parka Winter maybe early spring Toothbrush + past All seasons Water bottle Nalgene preferably. All seasons mug All seasons Long underwear Winter maybe early spring	Notepad and pencil	All seasons
Face cloth or small hand towel  Lip balm  All seasons  Rain gear  All seasons  Cadet issued parka  Winter maybe early spring  Toothbrush + past  Water bottle Nalgene preferably.  Mul seasons  All seasons  All seasons  Mul seasons  Water bottle Nalgene preferably.  Mul seasons  Mul seasons  Winter maybe early spring	Flashlight/ headlamp	All seasons
Lip balm  Rain gear  All seasons  Cadet issued parka  Winter maybe early spring  Toothbrush + past  Water bottle Nalgene preferably.  All seasons  Mug  All seasons  Long underwear  Winter maybe early spring	soap	All seasons
Rain gear  Cadet issued parka  Winter maybe early spring  Toothbrush + past  All seasons  Water bottle Nalgene preferably.  All seasons  Mul seasons  All seasons  Mul seasons  Winter maybe early spring	Face cloth or small hand towel	All seasons
Cadet issued parka  Winter maybe early spring  All seasons  Water bottle Nalgene preferably.  All seasons  Mug  All seasons  Ung underwear  Winter maybe early spring	Lip balm	All seasons
Toothbrush + past  Water bottle Nalgene preferably.  MI seasons  All seasons  All seasons  Long underwear  Winter maybe early spring	Rain gear	All seasons
Water bottle Nalgene preferably.  MII seasons  All seasons  Long underwear  Winter maybe early spring	Cadet issued parka	Winter maybe early spring
mug All seasons  Long underwear Winter maybe early spring	Toothbrush + past	All seasons
Long underwear Winter maybe early spring	Water bottle Nalgene preferably.	All seasons
	mug	All seasons
A scarf or other winter accessories Winter maybe early spring	Long underwear	Winter maybe early spring
A scarr of other winter accessories willter maybe early spring	A scarf or other winter accessories	Winter maybe early spring
Health card All seasons	Health card	All seasons

## Teaching Point C,

## Group Equipment

In this teaching point we will be discussing the group kit required for a typical expedition. It will be issued in a typical excursion and the entirety of the group is responsible for the kit. The kit in this section is not intended to be used or carried by a single individual the entirety of the time but is to be shared so the load is easier and all can develop the important skills.

- -Pot set
- -Fuel (Naphtha)
- -Cooking tool (Coleman peak single burner stove)
- -15-meter rope
- -compass
- -Map (topographical) or guide book
- -Food issued to the group and is then divided evenly
- -garbage bags
- -glow sticks
- -handheld radio
- -GPS
- -batteries
- -zip lock bags (resealable)
- -tent or equivalent.
- -water filter and new filter
- -first aid kit
- -survival kit

# Teaching Point D,

## **Activity Specific Equipment**

In this teaching point we will be discussing the kit required for specific expedition activities such as canoeing and mountain biking. This kit is usually issued and does not include specific clothing items such as biking wear for biking as you commonly will be completing these activities in uniform.

Canoeing	Mountain biking
Inspected non damaged canoe	Inspected non-damaged bike (1 per person)
Inspected non-damaged paddles (1 per person )	Inspected non damaged helmet (1 per person)
Spare paddles ( 1 per person )	Bike repair kit and tools
Canoe emergency patch kit	Chain grease hit me vest for 1 person in front, back and middle of the group
Bailer bucket	
Throw rope	
Signal light	
PDF fitted ( 1 per person )	
Painters ( rope ties to front and back)	

## confirmation activity

For this activity, I would like you to plan a 6-day excursion in summer consisting of one group of six people. will be performing a canoe portage during the five days. When planning this excursion you must make a generic pack list for the cadets and list the group materials needed for them to complete the task. When the first two aspects of planning are complete I would like to know both fuel and food requirements for the groups and any activity-specific items.

Generic kit list	

## Group kit list

Group kit (collum)	Activity specific kit (collum)
--------------------	--------------------------------

Food required	Fuel required

Sgt. O'handley