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ROYAL CANADIAN ARMY CADETS



NATIONAL STAR CERTIFICATION EXAMINATION INSTRUCTOR'S BOOK

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INTRODUCTION

The National Star Certification Exam is a very important event for all army cadets, and it is our job to ensure they are prepared to succeed. The study guide was written in an effort to:

- Explain fully the content of the exam and how it is tested
- Help the cadets review all the necessary material for the exam and help them solidify their understanding of the material, and
- Prepare them to for the exam by guiding them through a systematic and effective study program.

This instructor's book is a guide for corps' officers. It will help you monitor the progress of your cadets and update you on the NSCE. The cadet's study guide has all the answers to the quizzes and activities, however, the answers to the assignments are in this instructor's book.

For those of you who have taken correspondence courses, this structure of the study guide will be very familiar. It has been designed to allow cadets to complete most of their preparation independently, while corps' staff monitor their progress and offer assistance where required. In essence, the study guide is the student's manual for a correspondence course and this book is the tutor's reference.

To ensure your cadets are prepared for the NSCE, I urge you to:

1. **Monitor your cadets' progress.** The study guide has a suggested study schedule. Meet with your cadets to set due dates for assignments and follow-up on their progress. Even the most disciplined teenager will need some motivation to stay on schedule.
2. **Mark the unit assignments.** Having your cadets hand in their assignments will allow you to monitor their progress and provide them with deadlines. Units 1-10 are multiple-choice quizzes. Units 11-15 will require a little more work on your part, as they are practical tests.
3. **Provide remedial instruction where required.** The unit assignments are meant to be a confirmation of the cadets' understanding of the material. They should only complete the assignment after studying the unit. If a cadet is unable to pass the assignment after studying the unit and completing the quizzes, they may need additional help from you.

Unfortunately, the study guide does not come with all the materials required for the cadets to complete all the quizzes and assignments. We have included all the maps required, however, you will need to provide your cadets with:

1. **A Compass (in mils)**. *This is critical!* Although there are no questions on the written exam that require the use of a map and compass the practical tests do. During the practical skills test, only a map and compass will be used. There are no tests that require (or allow) a cadet to use a protractor. ***Make sure your cadets practice all the map and compass skills with a compass, not a protractor*** (Units 8-10).

The next few pages in this book are excerpts from the cadets' study guide and the final few pages have the assignment answers. I hope you and your cadets find the study guide informative and helpful.

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SECTION A

EXCERPTS FROM THE CADET STUDY GUIDE

CONTENT OF THE NSCE

QUICK OVERVIEW

To pass the NSCE you must obtain a minimum of 60% on the written test, and pass all five skills tests.

The exam includes:

PHASE 1

A. Written General Knowledge Exam



*THERE WILL BE
NO RETESTS
GIVEN ON THE
WRITTEN EXAM*

PHASE 2

B. Army Cadets Fitness Test

C. Bushcraft Skills Test (knots and lashings)

D. Map and Compass Skills Test

- i. Determine a 6-figure grid reference
- ii. Identify the elevation of a point
- iii. Measure a distance along a route
- iv. Orient a map by inspection
- v. Plot a grid bearing
- vi. Calculate declination
- vii. Orient a Map with a Compass

E. Classroom Instruction Test

F. Drill Instruction Test



*RETESTS MAY
BE GIVEN ON
TESTS B-F, IF
ONLY
ONE TEST IS
FAILED*

Content of the NSCE

A More Detailed Look at the Exam

A. Written General Knowledge Exam

The written general knowledge exam has 100 multiple-choice and true false questions. Each question is independent of each other and in the case of multiple-choice questions, will have four answer choices. Each question is worth 1 point and there is a time limit of 90 minutes. That will give you at little less than one minute per question, which should give you ample time to complete the exam. The questions on the written exam are mostly theoretical and can be answered very quickly. Calculators are permitted, however, you will need to provide your own.

The general knowledge exam will test all areas of knowledge from the star program. Subject areas that are better tested by having you demonstrate a skill will not be on the written test; therefore, there is no map work on the written exam. All of the map and compass questions can be answered without using a map, compass or protractor. The test construct is as follows:

PO 402 Fundamental Training	16 questions
PO 403 Bushcraft	25 questions
PO 405 Map and Compass	16 questions
PO 406 Marksmanship	14 questions
PO 410 Public Speaking	3 questions
PO 411 Leadership	18 questions
PO 412 Citizenship	6 questions
PO 413 Physical Fitness	2 questions

B. Army Cadet Fitness Test

To pass the NSCE you must obtain, as a minimum, the Bronze level of the ACFT. If you are unable to complete any portion of the test due to either a permanent or temporary physical condition (i.e.



Calculators are permitted on the exam; however, you will need to supply your own.



You will not be given a map, compass or protractor for this test; therefore, you will not have to plot bearings, measure distances, etc. on the written exam. Those skills are now part of the Map and Compass practical skills test.

sprain), you must have a doctor complete the form at Annex A to CATO 41-03. A copy of this form is included in Section D of this book, Preparing for the Exam Day. The doctor must state clearly if the condition is permanent or temporary.

Permanent medical condition. If you have a permanent medical condition that prevents you from attempting the ACFT, you must submit the doctor's form in ADVANCE to your CO who will submit it to the Area Staff. The staff at your Regional Headquarters will review your file and depending on your condition may grant you a waiver for the ACFT.

Temporary medical condition. If you have a temporary medical condition that prevents you from attempting the ACFT, you must submit the doctor's form in ADVANCE to your CO who will submit it to the Area Staff. If you pass all parts of the NSCE but have a temporary medical condition, you may be tested on the ACFT up until the end of August. You will not be given a pass on the NSCE until after the ACFT is completed. Until then your mark will be incomplete.

IMPORTANT NOTES: If you have either a temporary or permanent medical condition, it may not impede you from attempting all parts of the ACFT. You may be required to complete some parts of the fitness test.

If you attempt the ACFT, fail, and then report a medical condition, a waiver will not be granted; the failed mark will stand.



Waivers for the ACFT must be requested BEFORE attempting any part of the Physical Fitness Test.



The "Chin-up" on the ACFT has been replaced with the "Standing Long Jump". See Unit 16 for details.

C. Bushcraft Skills Test

Unit 12 explains this test in detail. To pass this test you will have to tie five of the eight knots listed below in a ten minute time limit.

- ✓ Thumb knot
- ✓ Clove hitch
- ✓ Half hitch
- ✓ Figure eight knot
- ✓ Double figure of eight (re-woven)
- ✓ Reef knot
- ✓ Bowline
- ✓ Fisherman's knot

D. Map and Compass Skills Test

The map and compass test has seven items. Because the written exam will only test knowledge and theory (not skill), you will be required to perform the following tasks:

- ❖ Given a point on a map, determine its six figured grid reference
- ❖ Identify the elevation of a given point
- ❖ Orient a map by inspection
- ❖ Plot a grid bearing (see Unit 11)
- ❖ Measure a distance along a route
- ❖ Calculate the magnetic declination of a given map
- ❖ Orient a map with a compass (see Unit 10)

E. Classroom Instruction Test

To pass this test you will have to receive at least 60% on a 30 minute classroom lesson. There is a copy of the assessment guide in Unit 13. After passing the General Knowledge Test, you will be assigned one of the following lessons to teach:

- EO 402.03 – Identify Officer and NCM rank structure in the Canadian Forces
- EO 402.06 – Identify badges and medals of the Royal Canadian Army Cadets
- EO 402.09 – Identify Canadian, provincial, territorial and Army Cadet Flags.
- EO 402.10 – List duties and responsibilities of a NCO
- EO 405.02 – State the meaning of conventional signs found on a topographical map
- EO 405.03 – Locate a specific point on a map
- EO 405.07 – Identify the parts of a compass and their functions
- EO 405.08 – Identify the points on a compass

You must prepare two copies of the lesson plan and give one to the evaluator prior to teaching. Any training aids you require must be prepared in advance and brought with you. A chalkboard or whiteboard and an overhead projector (OHP) will be available for your use.

IMPORTANT: Make sure you plan your lesson using the Lesson Specification Sheet from the Course Training Plan (CTP). The Army Cadet Reference Book only lists the EO number and the material to be taught, the CTP will provide valuable information on how the class is to be taught and may also identify additional resource information. This is especially critical for the drill lesson.

G. Drill Instruction Test

To pass this test you will have to receive at least 60% on a 30-minute drill lesson. There is a copy of the assessment guide in Unit 14. After passing the General Knowledge Test, you will be assigned one of the following lessons to teach:

- EO 401.01 – Adopt the position of attention, stand at ease, and stand easy
- EO 401.04 – Execute turns at the halt
- EO 401.05 – Execute paces forward and to the rear
- EO 401.06 – Execute the movements required for the right dress
- EO 401.07 – Salute with the hand at the halt
- EO 401.09 – Execute open and close order march
- EO 401.10 – Execute the movements for dismissal
- EO 401.15 – Fall-in and fall-out of the ranks

Changes and Highlights

The Cadet will be required correctly tie five of eight knots listed below:

- ✓ Thumb knot
- ✓ Clove hitch
- ✓ Half hitch
- ✓ Figure eight knot
- ✓ Double figure of eight (re-woven)
- ✓ Reef knot
- ✓ Bowline
- ✓ Fisherman's knot

USING THIS STUDY GUIDE

This study guide was designed to fully explain the NSCE and review all the necessary material. As you can see from the table of contents, this book is divided into five sections and then further divided into study units. The guide is presented in a logical manner that represents the two parts of the NSCE. Rather than list the study units in a specific study order, they are grouped by test. This will allow flexibility in the order topics are covered, while still clearly defining what is on each part of the exam. For example, the recommended study schedule suggests that you start with Unit 16 first. It is important that you identify now if you can pass the ACFT and if you need to start any physical training program.

Each study unit is organized in the following way:

- Unit Outline – This is a one-page summary of the reading, activities, quizzes and assignments for each unit.
- Pre-study Quiz/Activity – Each unit starts with a quiz to test your knowledge on the unit’s material. The answers are in Section E of this book. This will allow you to evaluate your knowledge and help you to spend the most time on your weakest areas. If you take the quiz and achieve at least 80% (with the exception of the skills tests), you should not spend much time, if any, on that unit. If you approach your study with the goal of receiving 100% on everything before you move on, you may not make it through the entire guide. Rather you should proceed to those areas where you need the most work and later return to the units you have done well on to try to improve your mark.

***Important note:** Each study unit is equally important to your success. It will not pay off to be an expert in Fundamental Training and weak on Map and Compass. Your goal must be to become competent in all areas that are tested*

- Unit Reading – This will include sections from the Army Cadet Reference Book (which are not reprinted here) and supplemental reading to enhance your understanding (which is included).
- Summary of Important Points – Some point form notes are included from the Reference Book reading. To be confident on the material, you must be able to elaborate on each point listed. If you cannot you should re-read the material. **THESE NOTES DO NOT REPLACE THE READING.** If you review only these point form notes, you will not be prepared to pass the unit. The notes are only included to ensure you do not miss any important points.
- Quiz/Activity – This second quiz or activity is a confirmation of your understanding of the material after you have completed the study portion of the unit. The answers to this quiz or activity are included in Section E of this book.

- Unit Assignment – This is the final confirmation of your understanding. The answers to the assignments are not included in this book; however, your corps' CO or Trg O will have an answer guide. Once you have completed the assignment you are to pass it to your Trg O or NSCE instructor for marking.

Throughout this study guide you will find tips and comments in the margins. These are there to help you. They are grouped into three categories and are preceded with the following symbols:



The Test - This symbol is associated with test design and test taking strategies. The notes in this area will tell you what to expect and give you tips on test preparation and writing.



Ideas – This symbol is associated with ideas to stimulate thought and ideas for extra study options. Cadets who follow the advice here will be the ones who excel on the exam.



Common Mistake – This symbol is associated with some of the most common mistakes made on the test.

CAUTION: This study guide is not merely a collection of exam questions. In actual fact, the officers who wrote all the questions in this guide have not seen the exam questions. Over the past few years many cadets have tried to prepare for the NSCE by writing as many past exams and practice exams as possible. This method of preparation relies on your ability to recall memorized facts rather than your understanding of the material. For a select few cadets this has worked; however, for the majority it has not. If you want to ensure your success, strive to understand the concepts presented in each unit. Not only will this guarantee that you pass the NSCE, it will also make the exam experience much less stressful.

SUGGESTED STUDY SCHEDULE

As you will notice, you have not been given an answer key for any of the assignments and some of the assignments require you to perform a skill. There is space left for you to write down specific dates. Your Training Officer may assign specific dates to some of the assignments, if not, I strongly urge you to set goal dates for yourself and stick to them.

This is only a suggested schedule and your Training Officer may modify this for you. This schedule is based on the assumption that you start studying the first week in October, have to write the written test in February and complete the skills tests in March.

Date of Phase 1 (Written Test): _____

Date of Phase 2 (Skills Tests): _____

Week 1:	Meet with your Trg O and set assignment due dates _____ Find out when Part 1 and Part 2 of the NSCE are _____ Complete Unit 15 _____
Week 2:	Read Explanation of NSCE Part 1 _____ Study Unit 1 _____ Quiz 1 _____ Assignment _____
Week 3:	Study Unit 2 _____ Quiz 1 _____ Assignment _____
Week 4:	Study Unit 3 _____ Quiz 1 _____ Assignment _____
Week 5:	Practice the Army Cadet Fitness Test (2 nd time) _____ Study Unit 4 _____ Quiz 1 _____ Assignment _____
Week 6:	Study Unit 5 _____ Quiz 1 _____ Assignment _____

Week 7: Study Unit 6
 Quiz 1
 Assignment

Week 8: Study Unit 13
 Activity A

Week 9: Unit 13 Activity B
 Unit 13 Activity C

Week 10: Practice the Army Cadet Fitness Test (3rd time)
 Study Unit 12
 Activity A

Week 11: Unit 12 Activity B

----- **CHRISTMAS BREAK** -----

Week 12: Study Unit 7
 Quiz 1
 Assignment

Week 13: Study Unit 8
 Quiz 1
 Assignment

Week 14: Study Unit 9
 Quiz 1
 Assignment

Week 15: Study Unit 10
 Quiz 1
 Assignment
 Study Unit 11
 Quiz
 Assignment

Week 16: Read Advice on Multiple Choice Exams
 Review assignments from Units 1-7

Week 17: **WRITE NSCE PART 1**

- Week 18:** Practice the Army Cadet Fitness Test (4th time) _____
Study Unit 12 _____
Quiz 1 _____
Assignment _____
- Week 19:** Unit 13 Assignment _____
- Week 20:** Unit 14 Assignment _____
Unit 12 Assignment _____
- Week 21:** Complete the checklists in Section D ‘Preparing for the exam day’.

SECTION B

PART 1 OF THE NSCE

UNIT 1

Fundamental Training and Citizenship

1. This unit should take you --- hour to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 80-90%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 80% you should complete all the reading, activities, and exercised in this unit.

2. Reading:

a. Army Cadet Reference Book, Pages 2-1 to 2-50 and 12-1 to 12-44

3. Activities and Exercise:

a. Complete Unit 1 – Quiz 1, then check your answers. If you get 80-90% on this quiz, move on and complete the Unit 1 Assignment. If you do not get at least 80%, review the areas where you have had difficulty and complete Activity A & Quiz 1 again. If you need further assistance, ask your Training Officer or your Gold Star Officer for additional help.

b. Complete Unit 1 – Activity A, then check your answers.

4. Unit 1 Assignment: This unit's assignment is a 10 question multiple-choice quiz. The questions are very similar to the type you will find on the Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You can expect to find 16 questions from this section on the written exam.

UNIT 2 BUSHCRAFT

1. This unit should take you three hours to complete. Start by completing quiz 1 and then mark it, using the marking guide at the back of the book. If you get 80-90%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 80%, you should complete all the reading, activities, and exercises in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 3-2 to 3-38
- b. Army Cadet Reference Book, Pages 3-46 to 3-53
- c. Army Cadet Reference Book, Pages 3-59 to 3-92

3. Activities and Exercise:

- a. Complete Unit 2 – Quiz 1, then check your answers. If you get 80-90% on this quiz, move on and complete the Unit 2 Assignment. If you do not get at least 80%, review the areas where you have had difficulty and complete Activity A & Quiz 1 again. If you need further assistance, ask your Training Officer or your Gold Star Officer for additional help.
- b. Complete Unit 2 – Activity A, then check your answers.
- c. Complete Unit 2 – Activity B, then check your answers.

4. Unit 2 Assignment: This unit's assignment is a 20 question multiple-choice quiz. The questions are very similar to the type you will find on the Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You can expect to find 25 questions from this section on the written exam.

UNIT 3 MARKSMANSHIP

1. This unit should take you two hours to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 80-90%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 80%, you should complete all the reading, activities, and exercises in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 6-2 to 6-27

3. Activities and Exercise:

- a. Complete Unit 3 – Quiz 1, then check your answers. If you get 80-90% on this quiz, move on and complete the Unit 3 Assignment. If you do not get at least 80%, review the areas where you have had difficulty and complete Quiz 2 & Quiz 1 again. If you need further assistance, ask your Training Officer or your Gold Star Officer for additional help.

- a. Complete Unit 3 – Activity 1, then check your answers.

4. Unit 3 Assignment: This unit's assignment is an 11 question multiple-choice quiz. The questions are very similar to the type you will find on the Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You can expect to find 14 questions from this section on the written exam.

UNIT 4 PUBLIC SPEAKING AND LEADERSHIP

1. This unit should take you one hour to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 80-90%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 80% you should complete all the reading, activities, and exercised in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 10-1 to 10-8
- b. Army Cadet Reference Book, Pages 11-1 to 11-53

3. Activities and Exercise:

- a. Complete Unit 4 – Quiz 1, then check your answers. If you get 80-90% on this quiz, move on and complete the Unit 4 Assignment. If you do not get at least 80%, review the areas where you have had difficulty and complete Activity A & Quiz 1 again. If you need further assistance, ask your Training Officer or your Gold Star Officer for additional help.
- b. Complete Unit 4 – Activity A, then check your answers.

4. Unit 4 Assignment: This unit's assignment is a 10 question multiple-choice quiz. The questions are very similar to the type you will find on the General Knowledge Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You can expect to find 21 questions from this section on the written exam.

UNIT 5

Map & Compass

Introduction to map using and Conventional Signs

1. This unit should take you one hour to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 80-90%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 80%, you should complete all the reading, activities, and exercises in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 5-1 to 5-13
- b. Additional Reading (included): Government of Canada
Website: <http://maps.nrcan.gc.ca/maps101/>
 - i) Mapping Terminology
 - ii) Tips and Hints
 - iii) Topographic Map Symbols
 - iv) Map Scale
 - v) What are Contours
 - vi) The National Topographic System

3. Activities and Exercise:

- a. Complete Unit 5 – Quiz 1, then check your answers. If you get 80-90% on this quiz, move on and complete the Unit Assignment. If you do not get at least 80%, review the areas where you have had difficulty and complete Quiz 2 & Quiz 1 again. If you need further assistance, ask your Training Officer or your Gold Star Officer for additional help.
- b. Complete Unit 5 – Quiz 2, then check your answers.

4. Unit 5 Assignment: This unit's assignment is a 10 question multiple-choice quiz. The questions are very similar to the type you will find on the Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



The webpage listed is a very good resource and has much more information than is listed here. Those who want a better understanding of this material are encouraged to visit the site and follow its links.



You can expect to find 16 Map and Compass questions on the written exam.

UNIT 6
Map & Compass
 Parts of a Compass and Points on a Compass

1. This unit should take you three hours to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 80-90%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 80% you should complete all the reading, activities, and exercises in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 5-30 to 5-37
- b. Additional Reading (included): Government of Canada Website: Maps 101
 Topographic Maps, The Basics.
<http://maps.nrcan.gc.ca/maps101/>
 - i) Compass Bearings
 - ii) Magnetic Declination
 - iii) The Magnetic Compass
 - iv) Area's of Compass Un-Reliability

3. Activities and Exercise:

- a. Complete Unit 6 – Quiz 1, then check your answers. If you get 80-90% on this quiz, move on and complete the Unit Assignment. If you do not get at least 80%, review the areas where you have had difficulty and complete Quiz 2 & Quiz 1 again. If you need further assistance, ask your Training Officer for additional help.
- a. Complete Unit 6 – Quiz 2, then check your answers.

4. Unit 6 Assignment: This unit's assignment is a 20-question quiz. The questions are very similar to the type you will find on the Map & Compass Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You can expect to find 16 Map and Compass questions on the written exam.

UNIT 7

Map & Compass

Conversion of Bearings, Plan and Lead a Nav Ex, and the GPS

1. This unit should take you 3 hours to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 80-90%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 80% you should complete all the reading, activities, and exercises in this unit.

2. Reading:
 - a. Army Cadet Reference Book, Pages 5-53 to 5-66

3. Activities and Exercise:
 - a. Complete Unit7 – Quiz 1, then check your answers. If you get 80-90% on this quiz, move on and complete the Unit 7 Assignment. If you do not get at least 80%, review the areas where you have had difficulty and complete Quiz 2 & Quiz 1 again. If you need further assistance, ask your Training Officer for additional help.

 - a. Complete Unit 7– Quiz 2, then check your answers.

4. Unit 7 Assignment: This unit's assignment is a 20-question quiz. The questions are very similar to the type you will find on the Map & Compass Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You can expect to find 16 Map and Compass questions on the written exam.

SECTION C

PART 2 OF THE NSCE

Unit 8

Map and Compass

Four/Six Figure Grid References, Measuring Distance, Contour Lines

1. This unit should take you two hours to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 100%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 100%, you should complete all the reading, activities and exercises in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 5-14 to 5-19
- b. Army Cadet Reference Book 5-24 to 5-29
- c. Additional Readings (included): Government of Canada Website: Maps 101 Topographic Maps, The Basics.
<http://maps.nrcan.gc.ca/maps101/>
 - i. Map Projections
 - ii. The UTM Projection
 - iii. Rectangular Grid References
 - iv. Rectangular Grid References, Civil & Mil

3. Activities and Exercise:

- b. Complete Unit 8 – Quiz 1, then check your answers. If you get 100% on this quiz, move on and complete the Unit 8 Assignment. If you do not get at least 100%, review the areas where you have had difficulty and complete Quiz 2 & Quiz 1 again. If you need further assistance, ask your Training Officer for additional help.
- a. Complete Unit 8 – Quiz 2, then check your answers.

4. Unit 8 Assignment: This unit's assignment is a 10 question multiple-choice quiz. The questions are very similar to the type you may find on the Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn the assignment into your Training Officer. They will mark the assignment and return it to you.



There are some theoretical questions from this section on the written exam; however, the critical component of this unit is your ability to accurately plot a six-figured grid reference, measure a distance and read an elevation.

UNIT 9
MAP AND COMPASS
Orient a Map Using a Compass

1. This unit should take you 2 hours to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. You need get a mark of 100% before moving on to the next unit. If you get any lower than 100% you should complete all the reading, activities, and exercises in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 5-37 to 5-42
- b. Additional Reading Included (slides)

3. Activities and Exercise:

- a. Complete Unit 9 – Quiz 1, then check your answers. If you get 100% on this quiz, move on and complete the Unit 10 Assignment. If you do not get at least 100%, review the areas where you had difficulty and complete Quiz 2 & Quiz 1 again. If you need further assistance, ask your Training Officer for additional help.
 - b. Complete Unit 9 – Quiz 2, then check your answers.
4. Unit 9 Assignment: This unit's assignment is a 10 question multiple-choice quiz. The questions are very similar to the type you will find on the Map & Compass Written Exam. You should complete the quiz without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You will have to calculate declination both on the written exam and on the practical test. You must calculate the declination correctly on the practical test to pass. You may use a calculator on both the written and practical test, however you will have to provide your own.

UNIT 10
MAP AND COMPASS
Measuring a Grid Bearing

1. This unit should take you 2 hours to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 100%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 100% you should complete all the reading, activities, and exercised in this unit.

2. Reading:

- a. Army Cadet Reference Book, Pages 5-50 to 5-52

3. Activities and Exercise:

- a. Complete Unit 10 – Quiz 1, then check your answers. If you get 100% on this quiz, move on and complete the Unit 10 Assignment. If you do not get at least 100%, review the areas where you had difficulty and complete Activity A & Quiz 1 again. If you need further assistance, ask your Training Officer or your Gold Star Officer for additional help.

- b. Complete Unit 10 – Activity A, then check your answers.

4. Unit 10 Assignment: This unit's assignment is a practical activity. It is identical to the requirement on the practical map and compass test. You must pass this skill in order to pass the map and compass skills test. You should complete the assignment without referring to any reference material. Once completed, turn it into your Training Officer who will mark the assignment and return it to you to make any corrections.



You will be required to use a compass when tested on this skill. Practice with a compass, not a protractor.



This is a skill test only; you will not find any questions from this section on the written exam.

UNIT 11

MAP AND COMPASS

Orient a Map by Inspection

1. This unit should take you one hour to complete. Start by completing quiz 1 and then mark it, using the marking grid at the back of the book. If you get 100%, you should feel comfortable enough to complete the Unit Assignment and then move on to the next unit. If you get any lower than 100% you should complete all the reading, activities, and exercised in this unit

2. Reading:

a. Army Cadet Reference Book, Pages 5-20

3. Activities and Exercise:

a. Nil

4. Unit 12 Assignment: This unit's assignment is a practical activity that must be assigned by your corps' Trg O. You will be required to orient a map by inspection on the practical map and compass test. You must pass this skill in order to pass the map and compass skills test. Have your Trg O provide you with a map of your local area and have him confirm that you have oriented the map correctly



This is a skill test only; you will not find any questions from this section on the written exam.

UNIT 12

Bushcraft Skills Test – Knots

1. This unit should take you two hours to complete; however you should revisit this unit a few times through out the training year and continue to practice what you have learned. The knots portion of the exam is a test of skill; therefore, before you start this unit you will need to have rope. Once you have all the materials on hand, start by reading the reference material, checking out some of the websites, as well as looking at the information and pictures included in these next few pages. Then complete Activity A, if you get anything less than 100%, review the material again before moving on. Once you feel confident, test yourself by completing Activity B, and then your unit Assignment.

2. Reading:

- a. Army Cadet Reference Book, Pages 3-42 to 3-46
- b. Army Cadet Reference Book, Pages 3-56 to 3-57
- c. Unit 12 Supplemental Reading (included)
- d. <http://www.mistral.co.uk/42brghtn/knots/42ktmenu.html>
- e. <http://www.korpegard.nu/knot>

3. Activities and Exercises:

- a. Complete Unit 12 Activity A (numbers 1 through 10), then check your answers.
- b. Complete Unit 12 Activity B, Using all of the knots that you listed in question one of the activity; tie each knot *without* using the reference material, as a final test for yourself. You must be able to complete *all* knots successfully because you will be tested on all five and you must know every one of the knots. Anything less than 100% is considered a fail on the skills test. If you need further assistance, be sure to ask your Training Officer for additional help.

4. Unit 12 Assignment: This unit's assignment is to complete all of the knots without reference to any of the study material. Once you feel that you can sufficiently accomplish tying all of the knots as well as defining their use, make an appointment with your training officer to be tested on each one of the knots. If your training officer is not available, contact any one of the other officers in your corps to assist you in testing for this assignment. If you do not receive 100% on this assignment, it is recommended that you *not* move on to another unit unless this has been accomplished.



The web pages listed have some excellent animated knots. Visit the site and you will be able to see the knot being tied.



You must tie all of the eight listed knots correctly to pass the test.

- Thumb knot
- Clove hitch
- Half hitch
- Figure eight knot
- Double figure of eight (re-woven)
- Reef knot
- Bowline
- Fisherman's knot

UNIT 13

Instructional Techniques – Classroom Instruction

1. This unit should take you 4 hours to complete. The instructional technique portion of the exam is practical and consists of two tests; the first one being the classroom lesson. Start by reviewing the reading material in the reference book, and then move on to the activities and exercises. You must complete all sections of this unit to be fully prepared for the IT test.

2. Reading:

- a. Army Cadet Reference Book, Pages 9-1 to 9-20
- b. Supplemental reading and charts provided.

3. Activities and Exercises:

- a. Complete Unit 13 - Activity 1, then check your answers
- b. Complete Unit 13 – Activity 2. If you get 70% or higher on your lesson, move on and complete the unit 14 assignment. If you do not, ask your Trg O to assign another lesson and complete Activity 1 and 2 again.

4. Unit 13 Assignment: This final assignment for this unit will take place in two parts. Both of which cannot be finished until about 2 weeks before the national exam takes place. This is when you will receive the actual classroom lesson you will be teaching at the NSCE exam. The first part of the assignment will be to prepare for this lesson, and the second part will be to teach it before you arrive at the test. Part one will include your lesson plan, training aids and anything else that you will require and must be checked by your training officer before attempting part two. Once you are prepared, you will teach the lesson, and be assessed on it. If there is time, teach it again a second time before arriving at NSCE, or at least practice it again at home.



You must achieve a minimum of 60% on the classroom lesson to pass.

UNIT 14

Instructional Techniques – Drill Instruction

1. This unit should take you 4 hours to complete. The instructional technique portion of the exam is practical and consists of two tests; the first one being the classroom lesson. Start by reviewing the reading material in the reference book, and then move on to the activities and exercises. You must complete all sections of this unit to be fully prepared for the IT test..

2. Reading:
 - a. Army Cadet Reference Book, Pages 1-5 to 1-58

3. Activities and Exercises:
 - a. Complete Unit 14 - Activity 1, then check your answers

 - b. Complete Unit 14 – Activity 2. If you get 70% or higher on your lesson, move on and complete the unit 14 assignment. If you do not, ask your Trg O to assign another lesson and complete Activity 1 and 2 again.

4. Unit 14 Assignment: This final assignment for this unit will take place in two parts. Both of which can not be finished until about 2 weeks before the national exam takes place, as that is when you will receive the actual drill mutual you will be teaching at the NSCE exam. The first part of the assignment will be to actually prepare for this lesson, and the second part will be to actually teach it before you arrive at the test. Part one will include your any preparation you need to do for the mutual. Once the training officer feels you are prepared, you will teach the lesson and be assessed on it as well. If there is time, teach it again a second time before arriving at NSCE, or at least practice it again at home.



You must achieve a minimum of 60% on the drill lesson to pass.

UNIT 15

Army Cadet Fitness Requirements

1. You should start your NSCE preparation with this unit and revisit it throughout the year. A record sheet is provided for you to be able to calculate your fitness level and track your progress.

2. Reading:
 - a. All of the required reference material is included and is taken from CATO 41-03. (Note: If you compare the material here to the CATO on-line you will notice a few differences. The information in this study guide is the latest and most accurate information. The online CATO will be updated shortly.)

3. Activities and Exercises:
 - a. Complete Unit 15 - Activity 1, complete the ACTF at least 3 times prior to NSCE Phase 2.

4. Unit 15 Assignment: You must pass the Bronze level of the ACFT to pass NSCE. Make sure you are familiar with the requirements and have one of your corps' officers set up and conduct the test for you.



You must achieve a minimum of 'Bronze' on the ACFT to pass the NSCE, however you are given more points for completing Silver or Gold.

SECTION D
MARKING GUIDES

CLASSROOM INSTRUCTION MONITORING GUIDE

Name: _____ Date: _____ Cadet Corps: _____

Lesson to be Taught: _____ Evaluator: _____

PREPARATION FOR LESSON	SUB-TOTALS	TOTALS
Did the Instructor: a. have a useful lesson plan? b. choose an appropriate classroom/training area? c. prepare and check training aids?	 /10 /5 /5	 /20
INTRODUCTION		
Did the Instructor: a. introduce him/herself? b. state what the cadet will learn? c. tell the cadet why it was important? d. tell the cadet where it fits into the overall training plan? e. carry out a review of a previously related lesson? f. establish class interest?	 /1 /1 /2 /2 /2 /2	 /10
PRESENTATION		
Did the Instructor: a. start teaching at a level of comprehension? b. identify teaching points? c. give clear explanations? demonstrations? d. use training aides? e. use a logical sequence?	 /2 /2 /8 /8 /5	 /25

DRILL MONITORING GUIDE

Name: _____ Date: _____ Cadet Corps: _____

Lesson to be Taught: _____ Evaluator: _____

INTRODUCTION	SUB-TOTALS	TOTALS
Did the Instructor: a. conduct a revision? b. use the correct squad formation? c. state the aim (What)? d. state the reason (Why)? e. state requirement for performance (Where)?	 	
		/10
BODY		
Did the Instructor: a. give a complete demo of the movement calling the time? b. give a demo of the first part of the movement by numbers, if applicable? c. explain the first part of the movement? d. permit the squad to ask questions? e. practice the first part of the movement – collectively – individually – collectively? f. teach and practice the second part and each subsequent part of the movement following the same sequence as for the first?	 	
		/45
CONFIRMATION		
Did the Instructor: a. practice complete movement, with instructor calling the time? b. practice the complete movement, with squad calling the time? c. practice the complete movement with squad judging the time?	 	
		/15

Age group points requirements for Females

Age	Points
12 - 14	20
15 - 16	20
17 - 18	24

Circle the score achieved in each of the exercises and add the points in the total column.

Test	Bronze						Silver						Gold					
	5	6	7	8	9	Pts.	5	6	7	8	9	Pts.	5	6	7	8	9	Pts.
20m Shuttle Run	3	4	5	6	7		5	6	7	8	9		6	7	8	9	10	
Sit Ups	27	28	29	31	32		33	34	35	36	37		39	40	42	43	47	
Push Ups	12	14	15	16	18		21	22	23	25	26		28	31	33	38	46	
Standing Long Jump (cm)	145	150	152	155	157		160	165	173	175	178		178	183	188	193	196	
	Total Bronze Points :						Total Silver Points :						Total Gold Points :					

Age group points requirements for Males

Age	Points
12 - 14	20
15 - 16	24
17 - 18	26

Circle the score achieved in each of the exercises and add the points in the total column.

Test	Bronze						Silver						Gold					
	5	6	7	8	9	Pts.	5	6	7	8	9	Pts.	5	6	7	8	9	Pts.
20m Shuttle Run	4	5	6	7	8		7	8	9	10	11		8	9	10	11	12	
Sit Ups	33	34	35	36	38		39	40	41	42	43		44	46	48	50	53	
Push Ups	18	20	21	22	23		24	26	27	29	31		32	35	39	43	50	
Standing Long Jump (cm)	155	165	178	193	203		170	183	198	208	221		185	198	218	226	239	
	Total Bronze Points :						Total Silver Points :						Total Gold Points :					

BUSHCRAFT SKILLS TEST
KNOTS

KNOT	SIGNATURE	COMMENTS
Thumb knot		
Clove Hitch		
Half Hitch		
Figure Eight		
Double Figure Eight (re-woven)		
Reef		
Bowline		
Fisherman's		



*When tying the bowline ensure the running end of the rope runs down on the **INSIDE** of the loop. If it is tied with the running end on the outside, the cadet has tied a cowboy bowline and will be marked wrong!*

MAP AND COMPASS SKILLS TEST

<i>Skill</i>	<i>Notes on assessment</i>	<i>Pass / Fail</i>
Determine a six figured grid reference	Mark a point on the map and ask the cadet to identify its six figured grid reference using the roamer on a compass.	
Identify the elevation of a given point	Mark a point on the map and ask the cadet to identify its elevation.	
Orient a map by inspection	Read the following narrative. "You are located here. You must correctly orient this map by inspection. You have ten minutes to complete this task."	
Plot a bearing	Mark a line on the map and label each end point (one A and one B). Give the cadet a compass and read him the following. "You are starting a point A and traveling to point B. You must correctly measure a grid bearing on the map provided."	
Measure a distance along a route	Mark a route no longer than 10 km along and label the start and end point. Read the following narrative. "You are traveling from point A to point B. Measure the distance along the route." The cadet is given a paper and pencil only for this exercise. The final answer must be +/- 100 meters.	
Calculate the magnetic declination	Given paper and pencil ask the cadet to calculate the magnetic declination of a given map. The cadet may use a calculator.	
Orient the map using a compass	Given a compass and the same map for calculating declination ask the cadet to orient the map using the compass. The cadet must set the declination on the compass and correctly orient the map.	

Note: All of the above tasks must be completed unassisted and without ANY prompting. During the NSCE the evaluator will do nothing more than read a narrative. No assistance of any kind will be given.

SECTION E

ANSWERS TO ASSIGNMENTS

UNIT 1
Fundamental Training and Citizenship

1. B	2. C	3. B	4. D	5. B
6. B	7. D	8. B	9. A	10. D

UNIT 2
Bushcraft

1. B	2. C	3. B	4. C	5. D	6. A
7. B	8. B	9. C	10. D	11. C	12. B
13. A	14. B	15. C	16. A	17. C	18. B
19. D					

UNIT 3
Marksmanship

1. C	2. B	3. A	4. D	5. A	6. B
7. C	8. B	9. D	10. C	11. B	

UNIT 4
Public Speaking and Leadership

1. A	2. D	3. B	4. C	5. D
6. C	7. A	8. D	9. B	10. A

UNIT 5
Map and Compass
Introduction to map using and Conventional Signs

- | | | | | |
|------|-----------|------|------|------|
| 1. B | 2. D | 3. A | 4. C | 5. B |
| 6. A | 7. orange | 8. C | 9. B | |

UNIT 6
Map and Compass
Parts of a Compass and Points on a Compass

- | | | | | | |
|-------|-------|-------|-------|-------|-------|
| 1. B | 2. D | 3. B | 4. C | 5. C | 6. D |
| 7. B | 8. D | 9. A | 10. B | 11. C | 12. B |
| 13. B | 14. D | 15. B | 16. D | 17. B | 18. A |
| 19. D | 20. A | | | | |

UNIT 7
Map and Compass
Conversion of Bearings, Plan and Lead a Nav Ex, and the GPS

- | | | | |
|--------------|--------------|--------------|--------------|
| 1. 3230 mils | 2. 2015 mils | 3. 1325 mils | 4. 0025 mils |
| 5. False | 6. B | 7. B | |

UNIT 8**Map and Compass****Four/Six Figure Grid References, Measuring Distance, Contour Lines**

- | | | | | |
|------|------|------|------|-------|
| 1. A | 2. B | 3. D | 4. B | 5. B |
| 6. C | 7. B | 8. B | 9. B | 10. A |

UNIT 9**Map and Compass****Orient a Map Using a Compass**

- | | | | | |
|------|------|------|------|-------|
| 1. C | 2. A | 3. C | 4. B | 5. D |
| 6. C | 7. D | 8. C | 9. B | 10. C |

UNIT 10**Map and Compass****Measure a Grid Bearing**

- | | | | |
|--------------|--------------|--------------|--------------|
| 1. 1050 mils | 2. 6225 mils | 3. 1450 mils | 4. 2900 mils |
| 5. 4400 mils | | | |

UNIT 11**Map and Compass****Orient a Map by Inspection**

To test the cadet on this skill you will need to have the cadet orient a map of the local area by inspection.

UNIT 12
Bushcraft Skills Test

Test the cadets on the eight required knots; they have a record sheet in their workbook for you to sign off. Make sure you are familiar with the knots and can identify any errors. In particular, make sure the cadets tie the Bowline correctly and do not tie a Cowboy's Bowline.

UNIT 13
Classroom Instruction

Assign one of the lessons listed in the section "Content of the NSCE" above and give the cadet one to two weeks to prepare. The cadet should prepare two lesson plans, one for the evaluator and one to use. Items that will be available include: chalk board or white board and OHP. Cadets will have to bring all other training aids with them and are expected to use well prepared training aids. Using the monitoring guide provided mark the cadet on his/her presentation of a 30 minute lesson.

UNIT 14
Drill Lesson

Assign one of the drill lessons listed in the section "Content of the NSCE" above and give the cadet one to two weeks to prepare. Using the monitoring guide provided mark the cadet on his/her presentation of a 30 minute lesson.

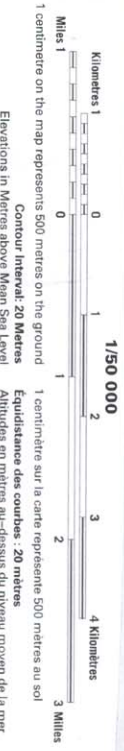
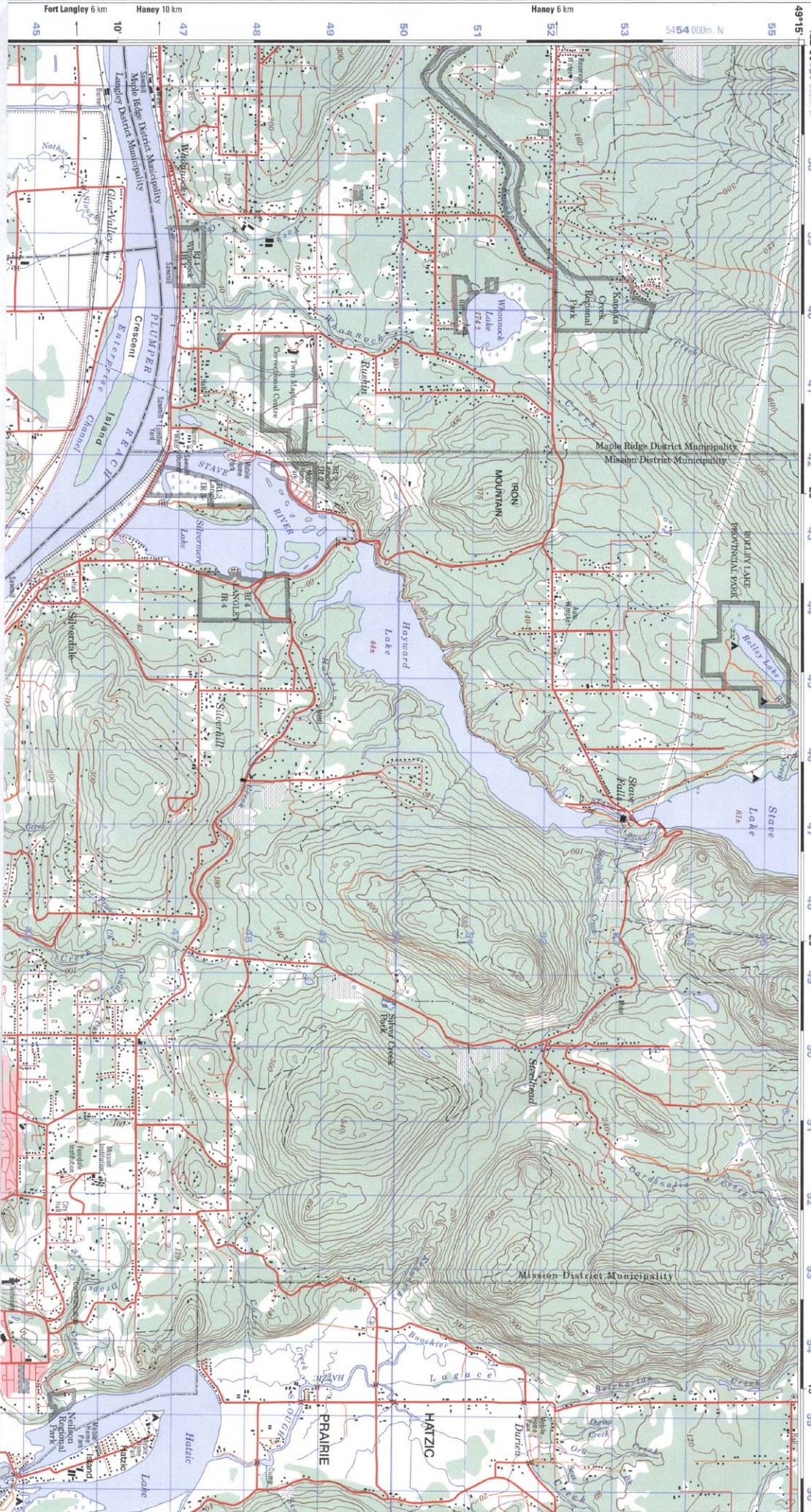
UNIT 15
Fitness Requirements

THERE IS NO ASSIGNMENT ALLOTTED IN THIS UNIT. HOWEVER, AS THE TRAINING OFFICER YOU SHOULD ENSURE YOUR CADETS ARE KEEPING ON TOP OF THEIR PHYSICAL TRAINING AND FILLING OUT THEIR RECORD CARD.

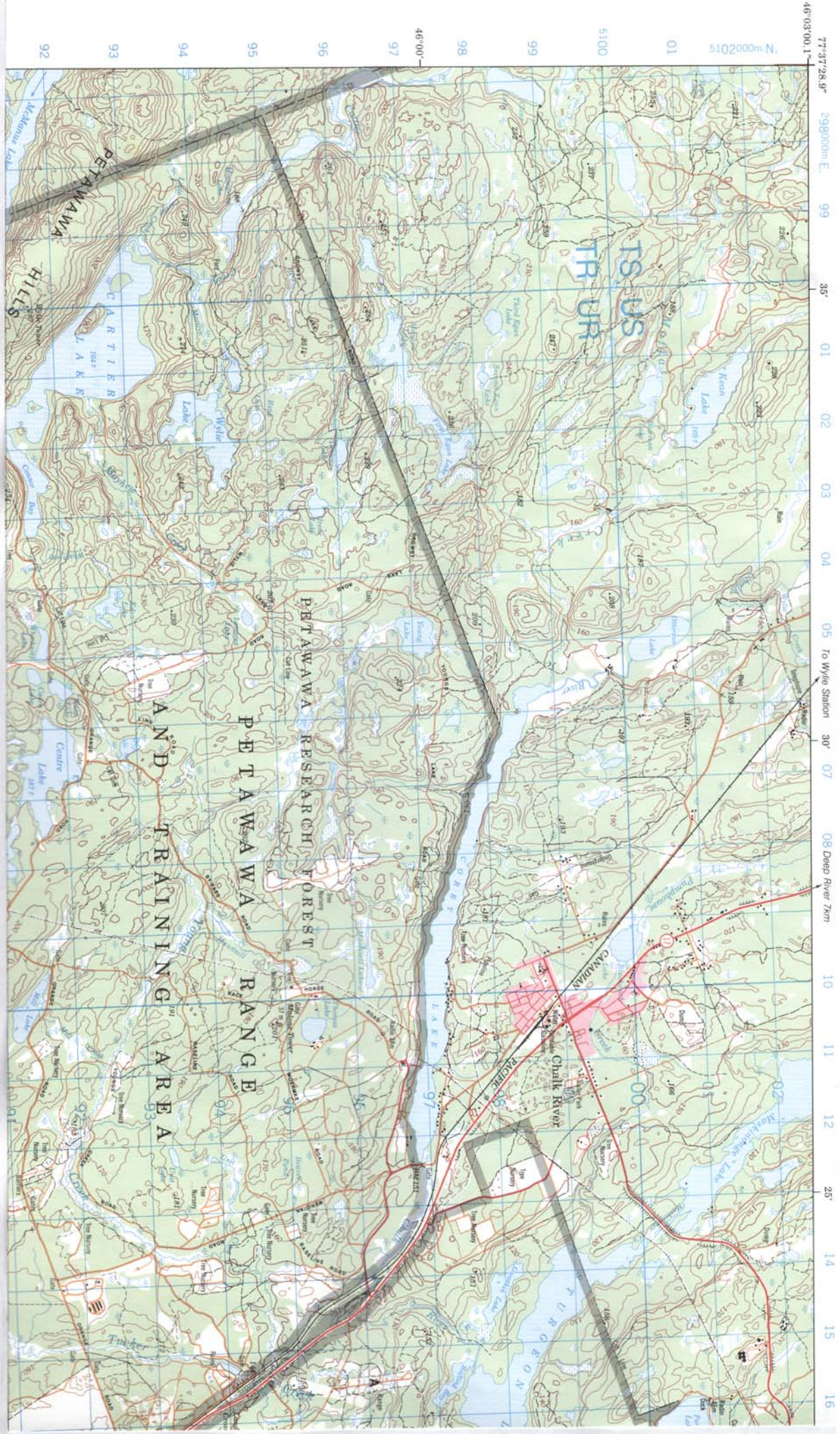
SECTION F

MAPS

(For use with Unit 8 – Quiz 1 and 2)



(For use with Unit 10 – Assignment)



77°37'28" W 2980000m E 99 35' 01 02 03 04 05 To Wyle Station 30' 07 08 Deep River 7km 10 11 12 25' 14 15 16

5102000m N

5100

99

98

46°00' 97

96

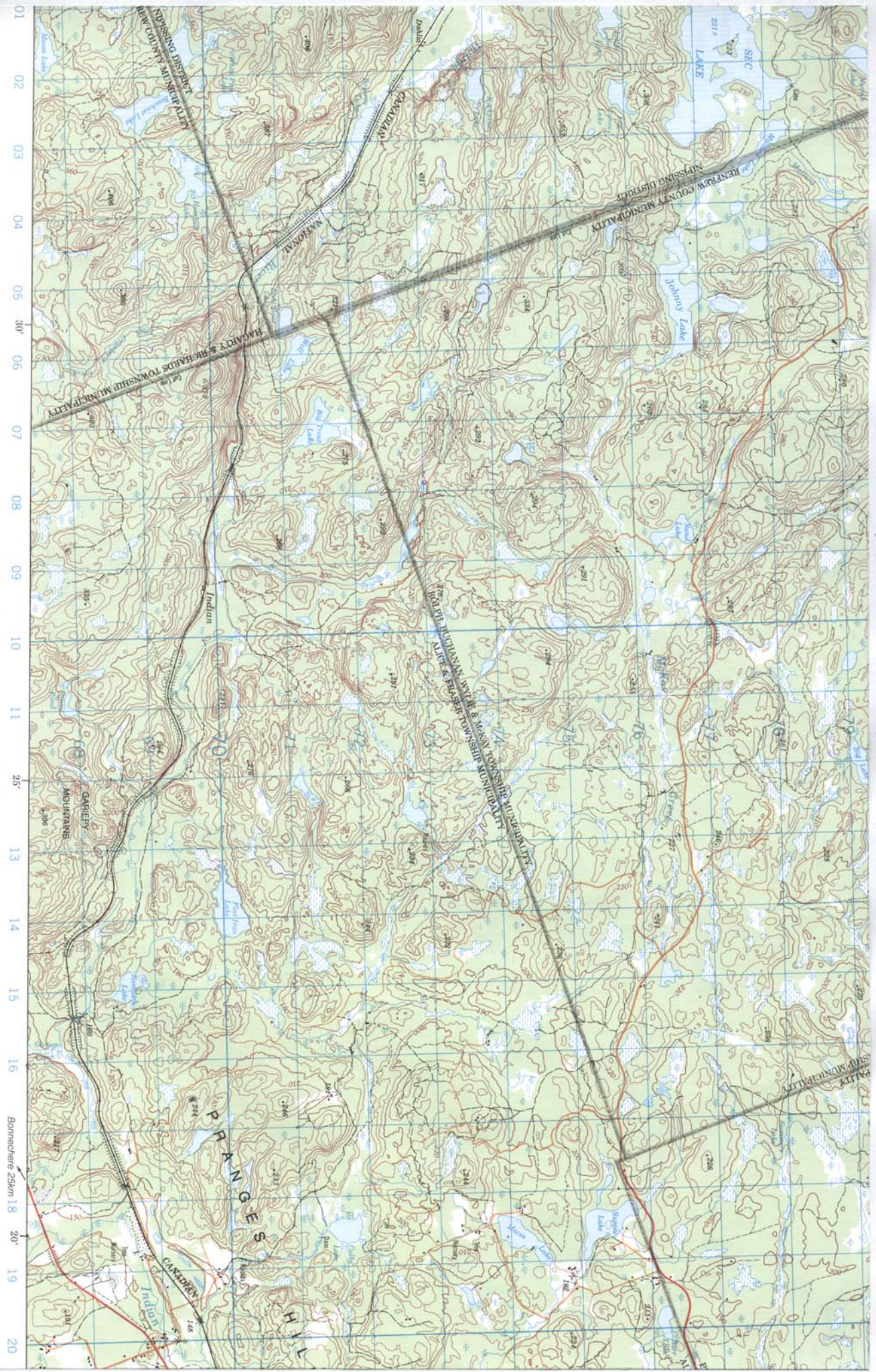
95

94

93

92

(For use with Unit 10 – Quiz 1 and 2)



01
02
03
04
05
30'
06
07
08
09
10
11
25'
13
14
15
16
Bonnechere 25km 18
20
20

(For use with Unit 8 – Assignment)

