NATIONAL CADET COMPETITION

Program Guide

CAPP 60-75
October 2021

Program Goals
Core Team Events
Administrative Resources

CIVIL AIR PATROL NATIONAL HEADQUARTERS

Supersedes: CAPP 52-4 February 2015 OPR: CAP/CP
Distribution: National CAP website

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PREFACE

This guide identifies the goals of the National Cadet Competition program and provides rules to govern the activity. Region and Wing competitions operate in accordance with Part 2, "Core Team Events," at a minimum, and are encouraged to use the other sections of this guide.

OVERVIEW

This guide outlines the core and non-core events available for cadet competition. Included are scoring sheets and miscellaneous recording sheets found useful for competition execution.

CHAPTER 1. INTRODUCTION TO THE NATIONAL CADET COMPETITION PROGRAM

1-1. MISSION, VISION, & PROGRAM GOALS

a. *Mission*. The CAP National Cadet Competition (NCC) program showcases the full range of challenges in cadet life experienced at the squadron level, and new areas of learning that are important to America.

b. *Vision*. Squadrons and individual cadets motivated to excel in all facets of the CAP Cadet Program.

c. *Program Goals*. To achieve its mission and vision, the NCC program pursues the following goals[1]:

(1) *Promote excellence in squadron-level cadet programs.* NCC's contribution in this goal area is measured in two ways. First, total cadet participation, system-wide, is measured year-to-year, using the 2010 data set as the initial baseline. Second, the average annualized cadet promotion rate for participating squadrons will be compared with the non-participating squadrons' average.

(2) *Promote individual excellence and learning in leadership, aerospace, fitness, and character.* This is measured through end-of-activity self and peer assessments, with a goal of achieving an average score of 4.0 or better out of 5.0.

(3) *Showcase today's cadets as tomorrow's aerospace leaders.* This public relations goal is measured quantitatively through media mentions and impressions, year-to-year, and qualitatively through partnerships maintained or strengthened with aerospace industry, senior military officials, educational leaders, and other natural stakeholders.

(4) *Achieve ever-increasing programmatic efficiency and return on investment.* This goal is measured in terms of the budget performance for appropriated and corporate funds expended at the national level and through feedback from teams and the NCC staff's after-action reports.

1. Goals. These program goals and metrics are mostly of concern only to NHQ but are shared here with the NCC community.

1-2. ELIGIBILITY

The NCC program is open to all cadet and composite squadrons. There are no special age or cadet grade requirements.

a. Individuals. Participating cadets must have completed Achievement 1.

b. *Pre-Qualification*. Regions appoint teams to the NCC national-level event. Each region will have two team slots. If a region cannot use one of its slots, the region is asked to inform NHQ/CP so that a team from another region may use it.

c. *Multi-Squadron Teams*. Teams may draw cadets from a maximum of two squadrons.

d. *Region, Wing, & Group Events*. Every echelon is encouraged to host a cadet competition of its own. The suggested best practice is for the teams placing first and second to advance to the next higher echelon's competition, at the discretion of the sending echelon's commander.

1-4. TEAM COMPOSITION

Teams consist of six cadets, with one cadet designated cadet commander.

a. *Alternates*. While some events involve fewer than the team's full complement of six cadets, there are no cadets designated as alternates at NCC. Provisions for injuries and medical limitations are discussed in rules for each event in Part 2 below.
b. *Team Escorts*. Each team must have two senior member or cadet sponsor member escorts who are current CAP members designated as "CPP approved." One serves as the senior project officer, and one must be licensed to drive CAP vehicles. Ideally, it is recommended that there should be an escort for each gender on the team.

1-4. REGISTRATION, SLOTTING, & MANAGEMENT

a. *Registration*. All individuals (cadets and senior escorts) selected to participate at the national-level competition must receive approval from their unit and wing headquarters via the NCSA application process in eServices. For details, please see gocivilairpatrol.com/ncc. The team registration window opens approximately 120 days prior to NCC and closes approximately 80 days prior to NCC. Teams may alter their rosters until 30 days prior to NCC.
b. *Commander Endorsements*. As with the NCSA slotting system, all cadets must receive wing endorsements via eServices to participate. Further, as NCC teams also represent their regions, the region endorses its two teams' rosters.
c. *Parent Endorsements*. Cadets will hand-carry to NCC their completed CAPF 60-81, *Application for Encampment,* (formerly CAPF 31). A parent's or guardian's signature is required for cadets under age 18.

1-5. EVENTS

To fulfill its mission and vision, the NCC program consists of the following core performance events for teams and numerous non-core events for individuals and small groups.

a. Core Team Events. Each team will compete in the following core events:
   Leadership
      Indoor positing of the colors (4-cadet color guard)
      Outdoor posting of the colors (4-cadet color guard)
      Standard Drill (4-cadet team Standard Drill, and 6 cadet team Element Drill)
      Team leadership problem
      Written exam[2]
      Uniform Inspection, (spot inspection and inspection preparation)
   Aerospace
      Written exam[2]
   Fitness Test
      Cadet physical fitness test, (Push Ups, Curl Ups, Sit and Reach and Mile Run)
   Character
      Sportsmanship modification (administratively assessed, not a live event)

2. Exam. The written exam contains leadership, aerospace, and AE current events subject matter, conducted as a single event.

b. *Non-Core Events*. They are pre-selected events chosen by the NCC staff to include in the competition. Each team is entitled to one slot in each non-core event. The non-core events are[3]:
   Leadership
      Extemporaneous and impromptu public speaking (individual)
   Aerospace
      Model rocketry (2-cadet team)
      Robotics (4-cadet team Rover Races, 2-cadet team Calculator-controlled robot)
      Panel Quiz (4-cadet team each round, rotating 6 cadets through)
      Aerospace/ES UAS – Using the STEM Drone, (4 cadets written exam from drone pilot course, 2 cadets flying drone mission)
   Fitness
      Obstacle course or fitness circuit (4-cadet team, plus non-competitors)
      Direction Finding Course (6-cadet team) Ref: CAPP2 CAP ELT/EPIRB SEARCH
   Character
      Pre-competition service project, with oral presentation (2-cadet team)

c. *Noncompetitive Activities*. The NCC program will ordinarily include noncompetitive activities such as tours, guest speakers, and other fun opportunities available at the host facility.

1-7. SCORING & AWARDS

a. USAF Chief of Staff Outstanding Cadet Team Championship Trophy.[3] This award is presented to the most outstanding overall team, based on performance in both the core and the non-core events. The full scoring procedures are shown below.

b. *Runner-Up Team(s).* NCC staff will present an overall second place and third place award.

c. *Event Awards*. NCC staff will present awards to the most outstanding team and/or individual in each event. Second place awards may also be presented for each event.

d. *NCC Ribbon*. Participation at NCC garners the "green" National Color Guard Competition Ribbon, IAW CAPR 39-3, *Award of CAP Medals, Ribbons and Certificates,* § 20-c. Staff members are awarded the NCSA Ribbon.

e. *Core-Focused Weighted Scoring.* Performance in core events has more weight than performance in non-core events because the core events generally involve the full team and represent the fundamental areas of the Cadet Program, while non-core events may only involve a portion of the team and/or represent areas of specialized training.

f. Penalties. Most events have some type of penalties identified on the scorecard. Only the Chief Judge in the event fills out the penalty section, and penalties are subtracted from the combined scores of all the judges, not from each judge's total.

3. "Jonesy." The team championship trophy, "Jonesy," lovingly nicknamed for the USAF Chief of Staff, Gen. David Jones, who created the trophy, is a perpetual award displayed at NHQ.

The following process is used to determine the winner of the team championship trophy:

(1) *Determine Rank Scores in Events.* In each event, teams or individuals representing teams earn a raw score, which is used to determine overall rank score for that event. A team with the highest raw score places first in a given event and receives 1 rank order point; the second-place team receives 2 rank order points; etc. Teams that fail to complete the event receive a point score equal to the number of teams participating plus 5 penalty points (e.g.: if ten teams complete the event successfully, a team that fails to complete the event is assigned 15 points).

(2) *Compute Rank Order Point Totals.* Add the team's total rank score points for the core events. This total sum is called the *core rank order point subtotal*. Calculate the *core rank order point total* by adding to or subtracting from points assigned in the sportsmanship modification, if any (see §2-8 below). Separately, add the team's total rank score points for the non-core events to obtain the *non-core event rank order subtotal.* Multiply that subtotal by 1.5. This operation weighs the core events more heavily than the non-core events. The resulting product is the *non-core event rank order total.*

(3) *Combine Rank Order Point Totals.* Add the *core rank order point total* to the *non-core event rank order point total*. This total sum is called the *grand total of rank order points*.

(4) *Sort by Grand Total Rank Order Points.* Sort the teams by their rank order point totals. The team with the lowest rank wins the NCC and is presented the USAF Chief of Staff Outstanding Cadet Team Championship Trophy. In cases of ties, where two or more teams share the same *grand total rank order points,* the team raw score on the written exam is the tiebreaker; if still tied, the overall point value for the core events will be used.

Illustration of Rank Order Scoring System													
Team	Core Event #1	Core Event #2	Core Event #3	Core Rank Order Subtotal	Sportsmanship Modification	Core Rank Order Total	Non-core Event #1	Non-core Event #2	Non-core Event Rank Order Subtotal	Non-Core Events	Non-core Event Rank Order Total	Grand Total (Core + Non-core) Rank Order Points	Overall Place
Galaxy	1	3	2	6	+2 minor infraction	8	7*	1	8	X 1.5	12	20	3
Raptor	2	2	3	7	0	7	1	2	3	X 1.5	4.5	11.5	1**
Predator	3	1	1	5	1 admirable conduct	4	2	3	5	X 1.5	7.5	11.5	2**

* Galaxy did not participate in non-core #1, so its rank order is figured as total of teams participating (2), plus 5 penalty points.

** Raptor and Predator are tied in the *Grand Total Rank Order Points.* The tiebreaker is the written exam (Core Event #1) raw score, so Raptor takes 1st place overall.

1-7. CHALLENGES TO JUDGES' & STAFF DECISIONS

Despite the best efforts of judges, staff, and competitors, it is conceivable for an event to operate contrary to its published rules, due to human error or uncontrollable variables on the field. Teams may challenge judges' and staff decisions in a manner consistent with the principles below:

a. *Quick Resolution*. Ideally, challenges should be resolved at the lowest possible level. If a possible problem can be rectified on-scene, the team commander should approach the event Marshal directly, as soon as possible, to request relief.
b. *Formal Resolution*. If the matter is not resolved to the team's satisfaction on-scene, the team commander may file a formal, written challenge with the Deputy for Operations within 1 hour of the event's conclusion or discovery of the problem. A written challenge must be the original work of the team commander; escorts and spectators are prohibited from assisting. See Appendix 3 for the written challenge form.
c. *Moot Issues*. The Deputy for Operations may declare a challenged matter moot if the decision would not alter the results of one of the top four competitors in a given event.
d. *Challenges are limited*. A team may only submit one challenge during the competition.
e. *Unsportsmanlike Conduct*. Teams are expected to show deference to the judges' decisions and challenge only those matters that are both meaningful and objectively contrary to NCC rules and procedures. Teams that file frivolous challenges or quibble may incur a sportsmanship modification (see §2-8).
f. *Finality*. A challenge is an appeal procedure because it seeks relief from a judge's or staff member's action. Accordingly, the Deputy for Operations ruling on all challenges is final.

1-8. EVENT STAFF

A staff of senior members and cadets support the participants and ensure the competition runs smoothly. The principal members of the staff are listed below, as is an organizational chart.[4]

Activity Director. Responsible for the safe, successful implementation of the NCC program, the NCC director is appointed by the National Commander and reports to NHQ/CP.

Deputy for Operations. This individual is responsible for the operation of the competitive events, ensuring they are conducted in compliance with the curriculum standards.

Event Marshal(s). Each competitive event is managed by an event marshal (EM), a senior or cadet member who explains the event rules to the judges, briefs the teams on the conditions of the various events, calls the teams to the field, and generally keeps a given event on schedule. The deputy for operations may appoint several event marshals.

Event Judges. The activity director appoints senior members, cadet members, CAP-USAF, USAF and others possessing special expertise to serve as event judges.

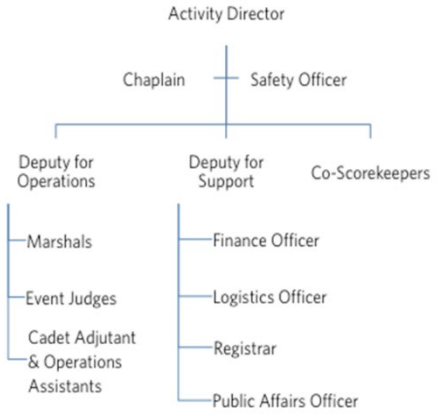
Deputy Director for Support. The chief administrative officer of the NCC program, this individual directs the registrar, finance, logistics, and public affairs, through a team of staff officers.

Cadet Adjutant. Appointed by the activity director through a competitive selection process, this cadet officer leads and coordinates a team of approximately ten or more cadet operations assistants in their work.

Cadet Operations Assistant(s). A team of approximately ten or more cadet operations assistants sets-up drill fields, prepares competition equipment, serves as runners, pre-stages teams, wrangles spectators, and provides other support as needed.

Co-Scorekeepers. Two senior members serve as co-scorekeepers, maintaining all completed scorecards and tabulating scores for all events, including the rank orders from raw scores.

4. NCC Staff



Safety. Reporting directly to the activity director, the safety officer leads NCC's administrative, planning, monitoring, education, and reporting functions as they relate to the CAP safety program. CAPP 60-70, *Cadet Encampment Guide,* part 3, provides practical guidance on ensuring the safety of participants and attendees at high-tempo cadet activities. A health services officer may assist with the safety program.

Chaplain. A chaplain, possibly assisted by one or more associate chaplains, provides a ministry of presence and serves as a resource supporting the moral and spiritual welfare of all NCC participants, staff, and attendees. Everyone is free to seek the chaplain's support at any time.

1-9. Uniform Requirements

Uniform requirements may vary year-to-year depending on the host facility's lodging situation. It is conceivable that cadets will live in field conditions, in which case only ABUs may be required. If "blues" are listed as the uniform of the day, cadets will wear ribbons; though "short stacks" are permissible (see CAPR 39-1, *Civil Air Patrol Uniform Regulation*, 11.1.2.2). When participating in drill and ceremonies events, cadets will wear a white shoulder cord on their left shoulder (if in blues) to recognize their status as members of a competition team. Teams may wear a low-cost PT uniform of their choosing during the appropriate events.

1-10. Financial Support for the National Level Event

NHQ normally covers the cost of lodging, meals, and local ground transportation in the NCC area for all team members, two senior escorts per team, and the program staff. NHQ also assists teams with their travel expenses, depending upon CAP's budgetary situation, on a pro-rated basis, with teams traveling a greater distance receiving more assistance than teams traveling shorter distances. The pro-rated travel support formula will consider the special situations of Hawaii, Alaska, and Puerto Rico. Details on financial support for travel may vary from year to year.

1-11. NHQ Operational Support to Regions and Wings

To assist region and wing competition directors, in addition to this guide NHQ can provide the resources listed below as requested.[5]

Question bank for written exam
Question bank for Panel Quiz (non-core event)

5. Support Resources
Support resources will be available by 15 February each year.

Uniform inspection preparation assignment cards
An Excel file that computes CPFT scores
A scoring program that compiles results for the entire competition
Suggested schedule for conducting the competition over a weekend
Best practices exchange and Q&A opportunities through NHQ-hosted webinars

The question banks and uniform inspection cards are available only by request of the region or wing Director of Cadet Programs (DCP). They must be secured, and immediately following the competition, the DCP (or designee) must destroy all hard copies.

CHAPTER 2. CORE TEAM EVENTS

2-1. INDOOR POSTING OF THE COLORS

a. *Objective*. This event encourages squadrons to form color guards capable of showing proper honor to the colors during local civic events and recognizes excellence in the technical drill and ceremonies relating to a realistic scenario where a color guard is asked to post and retrieve colors at an indoor function.

b. *Conditions*. The event consists of three main components: planning, posting, and retrieval. Any CAP cadet, regardless of grade, may compete in this event.[1]

Reporting In. The team commander reports to the chief judge upon initial assembly at the event site. Report should be sharp and crisp (salute not required if inside), identifying the team by name and/or number, and that they are reporting for Indoor Posting competition.

Team Composition. Color guards will consist of four cadets (two flag carriers and two guards), assigned by the team. The two cadets who are not participating in the outdoor posting event must serve on the indoor posting color guard, unless medically unable to do so.

Planning. The planning phase is administrative in nature. It is not scored, and cadets are not required to report for the planning portion in any particular manner. The EM will brief team commanders on specific rules appropriate for the setting, as might an event organizer. Each team will have ample time to contemplate the scenario and devise a plan. In devising their strategy, the color guard may consult with any cadet(s) on their team, but not with any senior member escorts. Then, the teams wait in a designated area until called to the field; cadets cannot sit as spectators until their team has completed the event.

Posting. When the EM calls the team to the field, it assembles in a designated location at the rear of a large meeting room or function hall (the "ready position"). When the event judge commands the team, "POST THE COLORS," the cadets will march down narrow aisles and around a dais to post the US flag and second flag (CAP, state, host organization, etc.), then return to the ready position in the most expeditious manner possible and fall out.[2]

Retrieval. Moments later and at the EMs direction, the team will re-form in the ready position and the event judge will command, "RETRIEVE THE COLORS." The team will navigate through the same aisles and around obstructions as was earlier the case, retrieve the colors, and march back to the ready position in the most expeditious manner possible and fall out.

Equipment. For the sake of logistical convenience, equipment will be provided by NCC.[3] This event is conducted in the standard short-sleeve blues service uniform.

c. *Scoring.* A single rubric, available in Appendix 1, is used to score this event. Raw scores are converted to rank order points.

1. Color Guard Grade Limits US Air Force standards limit color guard participation to NCOs and airmen. All CAP cadets are, of course, junior to Air Force enlisted personnel, and therefore it is appropriate for any cadet of any grade to serve on a color guard. Still, commanders should rotate interested cadets through color guard opportunities so that newer, younger cadets have a fair opportunity to participate.

2. Working Movements There is no single "correct" way for the team's members to position themselves and do their work in posting and retrieving the colors. Their judgment and professionalism are major factors throughout this event. All individual and team movements must be grounded in AFMAN 36-2203/CAPP 60-33.

3. Color Guard Equipment: US flag, CAP flag, flag poles (2), floor stands (2), parade rifles (2), flag carriers (2) web belts (2), white gloves (1 pr ea.)

2-2. OUTDOOR POSTING OF THE COLORS

a. *Objective*. This event encourages squadrons to form color guards capable of showing proper honor to the colors during local civic events and recognizes excellence in the technical drill and ceremonies relating to a realistic scenario where a color guard is asked to raise and lower the colors on an outdoor flagpole.

b. *Conditions*. The event is modeled on the reveille and retreat ceremonies (see AFMAN 36-2203, Section 7C and CAPP 60-33, Section 6D) on a simulated National Day of Mourning requiring the flag to fly at half-staff. This event consists of five main components: planning, raising, lowering, folding, and presentation. Any CAP cadet, regardless of grade, may compete in this event.[1]

Reporting In. The team commander reports to the chief judge upon initial assembly at the event site. Report should be sharp and crisp, including a salute if outside, identifying the team by name and/or number, and that they are reporting for Outdoor Posting competition.

Team Composition. This event involves four cadets, though only three participate in the raising portion. The two cadets who did not participate in the indoor posting event must participate in this event, unless medically unable to do so.

Planning. The planning phase is administrative in nature and is conducted per §2-1b above.

Music. For the flag raising portion, the bugle calls "Reveille" and "To the Colors" are played. For the flag lowering portion, the bugle calls "Retreat" and "To the Colors" are played.

Raising. When the EM calls the team to the field, it assembles in a pre-designated location by the EM a short distance from the flagpole (the "ready position") and a cadet operations assistant informally provides the team with a folded US flag. When the EM, acting as the squadron commander, calls, "SOUND REVEILLE," the 3-cadet team marches to the flagpole, alters its formation as necessary,[2 (p. 9)] and raises the flag (see AFMAN 36-2203, §7.24/7.25 or CAPP 60-33, §6.11/6.12 for details). When the flag has been raised to half-staff, as appropriate for the simulated National Day of Mourning, the team reforms, marches back to the "ready position," and falls out.

Lowering & Folding. Immediately after falling out, the team commander reforms the team with 4 cadets in the same pre-designated location above. This time as a 4-cadet team to lower and fold the flag as is done during retreat. The EM, acting as squadron commander, commands, "SOUND RETREAT," and the team marches to the flagstaff, and then as "To the Colors" plays, proceeds to lower and fold the flag (see AFMAN 36-2203 §7.27/7.28 or CAP 60-33 §6.14/6.15 for details).

Presentation. After reforming, the 4-cadet team marches to a position six paces in front of the chief judge. The team commander calls, "Present ARMS," steps forward to present the colors to the chief judge and renders present arms. The chief judge accepts the flag, passes it to a colleague, and returns the team's salute. The team commander then orders arms, returns to formation, commands, "Order ARMS," and marches the team off the competition area.

c. *Scoring.* A single rubric, available in Appendix 1, is used to score this event. Raw scores are converted to rank order points.

2-3. STANDARD DRILL

a. *Objective*. This portion of the competition tests each team's proficiency in marching, both as a color guard and as a standard element. The event is separated into 2 events, Color Guard Standard Drill and Element Standard Drill. The scores will be combined from both events for total points for the Standard Drill event. Both events take place within a 50' x 90' drill field.

b. *Conditions*.

Color Guard Standard Drill

(1) The teams will pre-marshal themselves at the ready line. When called by the EM, the color guard, with all color guard accessories, will form up in one rank at the pre-designated starting point (see diagram, page 11). The flag bearers may use either one or both hands to steady the flags as long as both flag bearers are in unison. The guards will march at right shoulder arms.

(2) When directed by the EM, the color guard commander will march the team into the presentation area. The color guard commander will direct the team to execute a Half Left About and a Halt, in such a manner as to position the team 12 paces from, and with the American flag bearer centered on, the Chief Judge. The color guard commander will command, "Present, ARMS." The color guard commander will report to the Chief Judge saying, "Sir/Ma'am, the [Team Name/Number] Color Guard reports for Standard Drill." The Chief Judge will return the salute. The Standard Drill two- and one-half minute clock starts.

(3) *Drill Routine*. The color guard commander will proceed with the drill, in sequence, and without adding any commands, as follows:

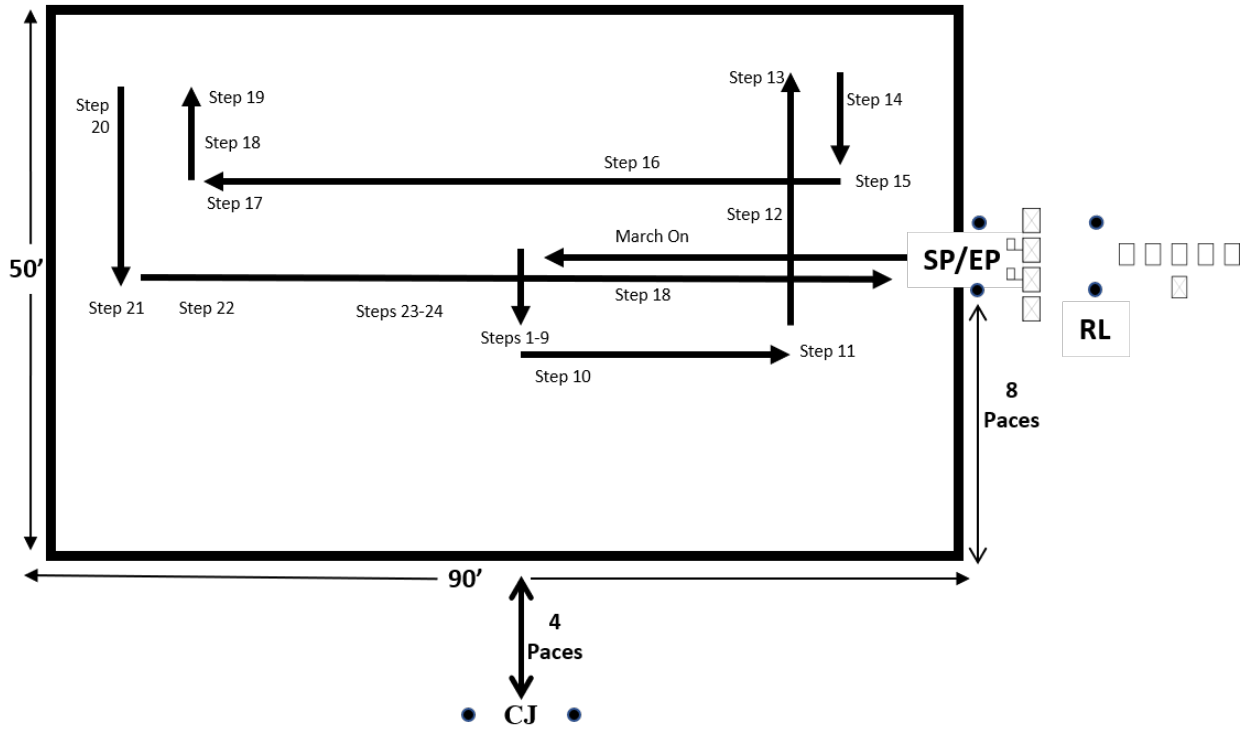
1. Order, ARMS
2. Order, COLORS
3. Parade, REST (Flags at Parade, Rest)
4. Color Guard, ATTENTION
5. Carry, COLORS
6. Present, ARMS (Flags at the Carry)
7. Order, ARMS (Flags at the Carry)
8. Forward, MARCH
9. Half Left About, MARCH
10. Forward MARCH
11. Half Left About, MARCH
12. Forward MARCH
13. Right About, MARCH
14. Forward MARCH

15. Half Right About, MARCH
16. Forward MARCH
17. Half Right About, MARCH
18. Forward MARCH
19. Left About, MARCH
20. Forward MARCH
21. Half Left About, MARCH
22. Forward MARCH
23. Eyes, RIGHT (for Chief Judge)
24. Ready, FRONT

(4) *Timing*. The timekeeper will start the clock when the Chief Judge returns the color guard commander's salute at the initial report in. The timekeeper will stop the clock when the team steps out of the presentation area. Each team must take a minimum of two- and one-half minutes for the Standard Drill event. There is no maximum time.

(5) The Color Guard will march off the presentation area to the designated ending point and will not report out to the Chief Judge. The Color Guard will be expected to utilize the entire presentation area as shown below.

COLOR GUARD PRESENTATION AREA FOR STANDARD DRILL



CJ: Chief Judge SP: Start Point EP: End Point RL: Ready Line

The Color Guard & Element Standard Drill pad is 50' by 90'. The Chief Judge is located four paces from the centerline of the long side. The starting point is located at the centerline of the short side to the Chief Judge's right. This is also the ending point where the team leaves the field. The diagram above illustrates the movements associated with the Color Guard Standard Drill.

Element Standard Drill

(1) Only drill movements contained in the CAP Drill and Ceremonies Manual will be used for Element Standard Drill. Drill movements must be completed at a minimum of two and a half minutes. The team commander will be given a card containing the required commands to be evaluated. Each movement must be done in order listed on

the card, but may be intermixed with transitional commands and movements, at the discretion of the team commander, to fully use the presentation area and to perform the required movements properly. No attempt should be made to memorize the commands on the card and no penalty will be assessed for left hand and head movements necessary to read the card during the drill.

(2) When called by the EM, the team will form as an element in line formation at the designated starting point with the team commander three paces to the front and facing the team. Once the team is properly aligned, the team commander will face about and wait to be directed to enter the presentation area.

(3) When directed by the EM, the team commander will turn to face the team and command, "Right, FACE," executing a left face at the same time. The team commander will march the element into the presentation area, giving whatever commands are necessary so the element is halted 12 paces from, and centered on, the Chief Judge. The team commander will command, "Left, FACE," executing a right face at the same time. The team commander will execute an about face, step forward three paces, and halt. [Note: if due to the layout of the space used, the team needs to march in from a different direction, they will attain the same position as described, then continue as directed.]

(4) The team commander will salute and report, "Sir/Ma'am, the [*Team Name or Number*] Team reports for Element Standard Drill." The Chief Judge will return the salute and produce a card containing the required commands. The team commander will approach the Chief Judge, get the card, and return to his/her normal position three paces in front of the element, turning to face the judges. The team commander may review the card for up to 30 seconds before executing an about face. The team commander will command "Present, ARMS," face about again, and salute the Chief Judge who will return the salute. **The clock starts.**

(5) The team commander will face about, command, "Order, ARMS," and proceed with the standard drill movements listed on the card. The team commander will direct the element through all the movements listed on the card in the sequence shown on the card, giving commands for each movement the team performs. All movements are made to the standard of 24-inch steps and cadence of 100 to 120 steps per minute, with distance and interval established to ensure movements are executed with order and precision.

(6) When the last movement on the card has been completed, the team commander will maneuver the team to a halt in a position such that the element is 12 paces in front and centered on the Chief Judge while taking his/her place three paces from the element, facing forward. The team commander will execute an about face, step forward three paces, and halt. The team commander will salute the Chief Judge and report "Sir/Ma'am, the [*Team Name or Number*] Team has concluded Element Standard Drill" (**The clock stops**). When the Chief Judge returns the salute, the team is dismissed. The team commander will face about, return to his/her position in front of the element, and march the element off the presentation area.

(7) *Judging criteria* will include:

(a) Precision of Execution: Dress, cover, alignment, and sequence

(b) Accuracy: Execution of movements per AFMAN 36-2203 and CAPP 60-33

(c) Cadence: Timing and snap

(d) Command Voice: Timing, snap, clarity

(e) Professionalism: Military bearing, esprit de corps, and poise

(f) Proper Report/Dismissal Procedures

(8) *Timing.*

(a) The timekeeper will time the team commander's review of the command card from the moment the review starts until the team commander gives their command to present arms (should be no more than 30-seconds).

(b) The timekeeper will start the clock when the Chief Judge returns the team's salute after the 30-second review. The timekeeper will stop the clock when the team commander salutes the Chief Judge at the report out. Each team will have a minimum of two and a half minutes for the Element Standard Drill event; there is no maximum time.

2-4. TEAM LEADERSHIP PROBLEM (TLP)

a. *Objective*. The TLP is a specially designed puzzle or game that tests a team's ability to collectively analyze a problem, creatively imagine a solution, communicate, and collaborate as a team.

b. *Conditions*.

TLPs are not announced prior to the competition. Teams should expect a TLP like those published in the *Learn to Lead Activity Guide* or on the encampment program website, www.gocivilairpatrol.com/encampment.

Each team will face the same TLP as the other teams.

The EM briefs the team commanders, and then the teams will have a set period to study the problem and develop a strategy for completing the TLP.

After the study period ends, the team executes their plan and physically attempts the TLP.

Upon conclusion of the TLP event, the NCC staff may lead a debriefing with all participants for educational purposes.

c. *Scoring*. TLPs may be scored based on factors such as elapsed time to complete the problem, number of tasks completed in a given time, number of errors made in the course of execution, number of victories if the problem pits the team head-to-head against another team, and similar factors. The scoring rubric for a given TLP is announced during the in-briefing; see Appendix 1 for a sample.

2-5. WRITTEN EXAM

a. *Objective*. The written exam is a test of academic knowledge in the fields of leadership and aerospace, both on an individual basis and collectively by comparing total scores among teams.

b. *Conditions*.

Format. The written exam is a 70-question, closed-book test, with a 70-minute time limit. Test questions may be presented in multiple choice, true / false, or matching format.

Subject Matter.[4] Exam questions are drawn from the most current edition of Phase I and II leadership and aerospace textbooks. As of this writing, those texts are *Learn to Lead,* volumes 1 and 2, and *Aerospace Dimensions,* 3rd edition,[5] all six modules. Basic principles of drill found in AFMAN 36-2203 and CAPP 60-33, chapters 1 through 4, are included. Aerospace and CAP-related current events of national significance are also eligible for inclusion on the test.

Cadets with Special Needs. NCC will make reasonable accommodations for cadets' special needs, as relating to written exams. Cadets' requests must be endorsed by an impartial professional (i.e.: school psychologist). Requests are due to the NCC by the deadline specified at gocivilairpatrol.com/ncc.,roughly 1 week prior to arrival at NCC.

c. *Scoring*.

Tabulation. Exam questions are of equal weight. Exam scores are tabulated by counting the number of questions answered correctly.

Ghost Cadets. If a team has fewer than a full team of six cadets testing, the "ghost" cadets receive the lowest score earned by a real cadet on their team, minus 20 points, or a score of 20 points, whichever is greater.

Rank Order. Team rank order is determined by sorting the teams by total number of points earned.

Individual Awards. The individual cadet(s) with the highest exam score will be recognized.

4. Written Exam Composition
* 32 leadership questions (4 per chapter)
* 30 aerospace questions (5 per module)
* 5 drill questions
* 3 aerospace current

5. Aerospace Editions
Approximately 90% of Aerospace Dimensions 3rd edition overlaps with the 2nd edition.

2-6. UNIFORM INSPECTION

a. *Objective*. In recognition of the central role that the uniform plays in the Cadet Program, cadets' knowledge of uniform regulations and ability to prepare a uniform are tested in a uniform inspection conducted in two separate settings: uniform preparation and spot inspection of uniform wear.

b. *Conditions*:

Uniform Preparation

The EM will select at random two cadets per team to participate in the uniform preparation portion of the inspection event.[6.] These two cadets work together on a single dossier listing a hypothetical cadet's grade and accomplishments. Their task is to select the necessary insignia from the assortment provided to them and place it correctly on the uniform. Additionally, cadets will be evaluated on their ability to iron and otherwise prepare that uniform within 30 minutes. The hypothetical cadet uniform will be a "blues" combination for either a male or female cadet, regardless of the participant's gender. The hypothetical cadet's uniform will not be worn but displayed on clothes hangers for inspection.

Report In. The senior cadet of the two on the team will report to the judge. Report should be sharp and crisp (salute not required if inside), identifying the team by name and/or number, and that they are reporting for Uniform Prep competition.

6. Randomization.
For the sake of fairness, the EM selects the random cadets in advance by consulting the team roster and choosing cadets whose last name place, say, 4th and 5th when listed alphabetically.

Report Out. Upon completion of the timed phase, the senior cadet of the two on the team will report out to the judge. Report should be sharp and crisp (salute not required if inside), identifying the team by name and/or number, and that they have concluded the Uniform Prep competition.

Cadets will have access to CAPR 39-1, irons, ironing boards, small scissors, a ruler, and similar items useful for preparing a uniform.

Spot Inspection of Uniform Wear

(1) At a predetermined time, unknown to the teams, the EM will select at random two cadets per team to participate in a spot inspection of uniform wear.[6]

(2) The selected cadets will be called forward at a moment's notice and made to stand for a uniform inspection. Ordinarily, this event will be conducted when the cadets are in the "blues" combination. Flight caps will be worn during the inspection, even if indoors. A reasonable amount of sand / dirt on the shoes will be forgiven due to the spot nature of the inspection.

(3) *Report In*. Each cadet will report in when each judge approaches them to conduct the inspection. Report should be sharp and crisp and will include a salute, identifying the cadet by name and team, and that they are reporting for Uniform Inspection.

(4) *Minimum Standards.* Cadets will be judged using the scorecard found in Appendix 1. Note that the rubric focuses on fundamental matters of compliance only. Cadets may earn the maximum number of points available simply by meeting CAPR 39-1 standards; extra points are not awarded for exceeding the standard. For example, shoes that are "shined and good repair" meet the CAPR 39-1 standard, while shoes that are spit-shined to a high gloss exceed the standard. Uniforms that are appropriately sized meet the standard, while uniforms that are form-fitted by a professional tailor exceed the standard.

(5) *Team Standardization.* The ability of a team to standardize its appearance will be evaluated only to a minimal extent. Matters that can be standardized without incurring significant cost will be evaluated, but cost-sensitive matters of uniformity will not be. For example, shoe style, fabric weight of uniforms, whether some females wear skirts and others wear pants, will not be evaluated. This event is conducted in recognition that cadets often wear hand-me-down uniforms. Consequently, the event tests the cadets' ability to wear their uniform correctly and proudly, not on their ability to purchase brand new uniform items.

(6) *Report Out*. Upon completion of the uniform inspection by each judge, the cadet will report out to the judge. Report should be sharp and crisp and will include a salute, identifying the cadet by name and team, and that they have concluded the Uniform Inspection.

c. *Scoring*. The two portions of the event – the uniform preparation and the spot inspection – are scored separately, each using its own rubric. However, those two scores will be added together to produce a single score for the team. Team rank order is determined by sorting the teams by total number of points earned.

2-7. CADET PHYSICAL FITNESS TEST

a. *Objective*. This event measures performance in four exercises, both individually and collectively by comparing total scores among teams. To maintain a competitive challenge, the CPFT does NOT use the CPFT from CAPP 60-50, *Active Cadet Fitness Guide*, but retains events from the previous CAP fitness test, as laid out in this section.

b. *Conditions.*

(1) *CPFT Events. (See Section 2-7. d, "CPFT Events," for descriptions on how to execute each CPFT event.)* The CPFT consists of push-ups, curl-ups, the sit-and-reach, and a one-mile run. Two cadets from each team must complete each of the exercise-based events, and all cadets, unless medically excused, must complete the run. The push-ups, curl-ups, and sit-and-reach are conducted as described in §2-7d. Which cadets on each team perform each exercise-based event may be selected randomly or designated by the team captain, at the NCC Director's discretion.

(2) *Weather Conditions.* On the day of the event, the NCC director considers the weather conditions and forecast. For the run portion, only the 1-mile run will be offered in good weather, and only the Pacer run in inclement weather (if an indoor venue suitable for the pacer is available).

(3) *Heats.* The CPFT events may be conducted in multiple heats, with multiple teams assigned to a given heat.

(4) *Spotters & Repetition Counters.* As with every other portion of NCC, adult and cadet judges, assisted by the EM, preside at the CPFT. However, it may be logistically necessary for the judges to be further assisted by spotters and repetition counters during the push-up, curl-up, and sit-and-reach portions of the CPFT, especially at region and wing competitions that operate with smaller staffs. (For example, people are needed to hold down

competitors' feet during the curl-ups.) The cadet operations support staff are obvious candidates for this work, but if even more helpers are needed, the Deputy for Operations may recruit seniors, spectators, and even cadet competitors to assist, provided that no spotter or repetition counter is affiliated with the affected team.

(5) *Home-Based Testing.* Region and wing competition directors may allow teams to conduct the CPFT in their home units, with the results attested to by the unit commander and a second senior member, as a time-saving measure if the activity's logistical situation so necessitates.

c. *Scoring*.

(1) *Scores.* For each event, an individual's score will be used for their age and gender using the PT Scoring program maintained by National Headquarters Cadet Programs Section. Cadet grade is not a factor in this event. The National Competition Staff will provide a Scoring Chart for Wing and Region reference.

(2) *Total Score.* The sum of the scores in the exercise event the cadet performs and the run yields the cadet's total raw score.

(3) *Prior Medical Limitations.* All cadets will automatically be scored as Category I unless they present a CPFT Waiver Request using the Cadet Physical Fitness Category Assignment sheet found in CAPP 60-50, *Active Cadet Fitness Guide*. This document must have been endorsed by a physician within the previous 90 days. NCC staff reserves the right to validate the requested fitness category assignment by contacting the physician. Completed waiver requests must be submitted to the NCC staff by the deadline specified at gocivilairpatrol.com/ncc., roughly 1 week prior to arrival at NCC. These documents will be handled and safeguarded per CAPR 160-1(I), *Civil Air Patrol Safety Program*.

(4) *Scoring Medically Limited Cadets.* Cadets restricted from performing one or two of the exercise events will participate in a different event if possible. Partially restricted cadets who are assigned to Categories II or III will receive for the waived event(s) the lowest raw score received on any exercise-based event, or the run, by their teammates.[7]. Fully restricted cadets who are assigned to Category III or IV will receive the mean raw score earned by their team.

(5) *Recent Injuries.* If a cadet is injured after the deadline for the CPFT Waiver Request and cannot participate in one or more CPFT events, he or she will receive the same score as the lowest performing teammate in that event(s).

(6) *Ghost Cadets.* If a team competes with fewer than six cadets for reasons not relating to medical status, the "ghosts" receive the lowest score earned by a real cadet on their team, minus 25 points, or a score of 50 points, whichever is greater.

(7) *Rank Order & Awards.* Team rank order is determined by sorting the teams by total number of points earned. Individual awards will be presented to the top cadet[8] and runners up.

d. *CPFT Events.*

(1) **Push-ups.**

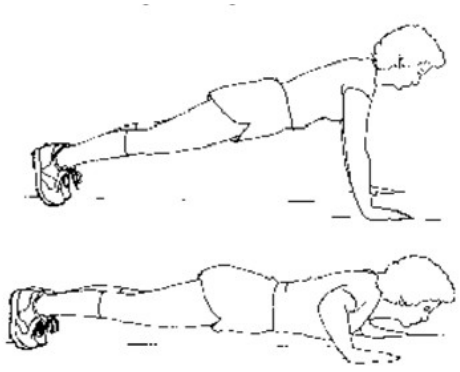
(a) *Objective*. To measure upper body strength and endurance.

(b) *Equipment*. Recording, metronome, drum, or someone to clap their hands or call cadence.

(c) *Testing*.

(1) Test Surface. Conduct the test on a flat surface, preferably one that is clean and cushioned.

(2) Stance. The cadet lies face down, with hands under shoulders, arms straight, fingers pointed forward, and legs straight, parallel, and slightly a part (approximately 2-4 inches) with toes supporting the feet.



(3) Performing the Exercise. To complete a push-up, the cadet must straighten their arms, keeping their back and knees straight. Then, the cadet must lower their body, while keeping their back and knees straight, until there is a 90-degree angle at the elbows, with their upper arms parallel to the floor.

(4) Judging Performance. To judge if the cadet lowers their body enough, a partner holds out his or her own hands to a point such that when the cadet being tested touches their shoulders against the partner's hands, a 90 - degree angle is formed at the cadet's elbows.

7. CPFT Medical Limitation Example. Suppose a cadet is restricted from the mile run and push up, but scores in the 90th percentile for the curl up and the 70th percentile for the sit-and-reach. He or she would receive a 70 for the two waived events.

8. Gender & CPFT Awards. By virtue of the percentile scoring system, male and female cadets compete on equal footing. Therefore, there is no need to adjust scores based on the team's gender composition, nor provide separate awards for the top male and female.

(5) Cadence. The push-ups are done to an audible cadence (recording, clapping, drum, metronome, oral command, etc.) with the cadet completing one (and only one) push-up every three seconds and continuing until they can do no more in rhythm (having not done the last three in rhythm).

(6) Resting. The cadet is free to take as long as they wish to reach the up position, and as long as they wish to reach the down position, provided they begin a new push-up every 3 seconds. The cadet may rest in the up or down position, but the President's Challenge recommends cadets remain in motion throughout the entire 3 second interval to achieve the best results.

(d) S*coring*.

(1) The test administrator controls the recording or metronome, or marks cadence orally or by clapping their hands.

(2) Each cadet's judge should judge if the repetitions are being done in rhythm and count them aloud.

(3) Record only those push-ups done in proper form and rhythm.

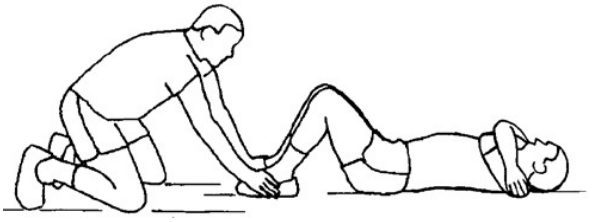
(4) Score one repetition for every instance when the cadet correctly straightens their arms and lowers their body until there is a 90-degree angle at the elbows.

(2) **Curl-ups.**

(a) *Objective*. To measure abdominal strength and endurance.

(b) *Equipment*. Stopwatch.

(c) *Testing*.



(1) Conduct the test on a flat surface, preferably one that is clean and cushioned.

(2) Have each cadet lie on their back, with their knees flexed and feet about 12 inches from their buttocks.

(3) A partner must hold the feet of the cadet being tested.

(4) Have the cadet cross their arms and place their hands-on opposite shoulders, while holding their elbows close to their chest.

(5) Keeping this arm position, the cadet raises their trunk by curling up to touch their thighs with their elbows. Then the cadet lowers back to the floor so that the shoulder blades touch the ground.

(6) This is a one-minute test. To start the test, a timer calls out, "Ready . . . GO!" The timer will call out when 30 seconds remain, and again when 10 seconds remain in the test. At precisely 60 seconds, the timer calls out "Stop!"

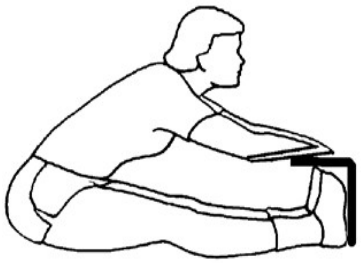
(d) *Scoring.* The judge will keep score. This should not be delegated to the person holding the cadet's feet. Score one repetition every time the cadet correctly raises their trunk by curling up to touch their thighs with their elbows and returns to the starting position. A full count is completed when the cadet returns to the starting position (down). Count the repetitions aloud.

(3) **Sit-and-Reach**.

(a) *Objective*. To measure the flexibility of the lower back and hamstrings.

(b) *Equipment*. Use a commercially made "Sit & Reach Box", or construct them using the instructions in CAPP 60-50, *Active Cadet Fitness Guide*, Appendix A. Ensure your measuring instrument on the box measures centimeters.

(c) *Testing*.



(1) Cadets remove their shoes and sit on the floor with their knees fully extended. Feet should be shoulder-width apart and the soles of the feet must be held flat against the box.

(2) With hands on top of each other, palms down, and legs held flat, the cadet reaches along the meter as far as possible, without bouncing.

(d) *Scoring*. After three practice reaches, the fourth reach is held for at least one second while the distance is recorded. Scores are recorded to the nearest centimeter.

(4) **One-mile run.**

(a) *Objective*. To measure cardiovascular endurance.

(b) *Equipment*. Stopwatch (ideally a large screen visible by runners). A clearly defined/labeled track measured to one mile. Track should be reasonably flat with no cross-traffic, without numerous turns. If the only option involves cross-traffic, road guards should be posted to stop traffic as cadets run by. It is recommended that video be used to record the finish line, with elapsed time either visible on a screen or audible on the tape.

(c) *Testing*.

(1) Cadets may run together or in heats.

(2) Have the cadets being tested ready themselves behind the starting line. Faster cadets should be positioned at the front of the pack.

(3) At the command, "Ready, GO!" cadets start running and timing begins.

(4) Supervisors should be stationed at the half-mile mark of road courses, or as the situation warrants, to ensure each cadet reaches the waypoint. Supervisors must remain alert to potential safety hazards and monitor cadets for potential injuries or exhaustion.

(5) Cadets may run, jog, or walk during this event.

(d)*Scoring.*

(1) Multiple recorders may be used. No more than 10 runners per recorder.

(2) It is recommended that team escorts be used to identify cadets as they are approaching the finish line, but escorts will not serve as recorders.

2-8. SPORTSMANSHIP MODIFICATION

a. *Objective.* CAP cadets are expected to conduct themselves in an age-appropriate, professional manner always. The sportsmanship grade is a mechanism used to commend teams that demonstrate an extraordinarily high standard of personal conduct, and (if necessary) to penalize teams whose unacceptably poor conduct brings discredit to themselves and CAP.

b. *Conditions.* A 3-judge panel designated by the director before the start of NCC, but unknown to the teams, covertly observes team performance throughout NCC, noting instances where individuals or whole teams distinguish themselves through extraordinarily high or unacceptably poor conduct. The panel will meet each evening to share observations. Any judge may propose a team be cited or commended for conduct coming to be known since the previous day's meeting. If another judge seconds the motion, the judges vote to determine the point increase or decrease assessed on the team.

c. *Scoring.* The table below provides guidance on how many points should be affected by the team's level of sportsmanship. The assessment is set by finding the mean of the three judges' scores.

Admirable Conduct. Despite the cost to their own team, these two ball players carried an injured opponent around the bases. Source: *values.com*

Moderate infraction	+ 1 point	added to the **rank order** point subtotal
Unacceptable conduct	+ 3 to 10 points	added to the **rank order** point subtotal
Admirable conduct	-1 point	subtracted from the **rank order** point subtotal

d. Note that bad sportsmanship, represented by infractions, *adds* points, while good sportsmanship *subtracts.* This is because the most outstanding overall team is that which earns the *lowest* amount of rank order points.

e. Rarity. The sportsmanship modification will be rarely invoked. If past history can predict future behavior, we should expect to see only one or two instances per decade where a modification will be deemed necessary. Still, there is value in declaring here, in advance, that sportsmanship modifications are permissible at NCC.

e. Notice & Appeal. NCC staff will announce modifications at a meeting of team commanders, as soon as is practical. Affected teams may appeal the panel's decision, via a written statement to the NCC director, whose decision is final.

CHAPTER 3. INDIVIDUAL AND SMALL GROUP ELECTIVES

3-1. PUBLIC SPEAKING

a. *Objective.* This event promotes confidence and competence in public speaking, a life skill important to anyone who aspires to a position of leadership.

b. *Conditions.* This event is divided into two portions, an extemporaneous speech, prepared by the cadet prior to arrival at NCC, and an impromptu speech, prepared at NCC on short notice.

Extemporaneous: Cadets will have 8 to 10 minutes to deliver a persuasive talk, taking a stand on any subject that can reasonably be related to CAP – leadership, aerospace, military service, ethics, volunteerism, etc. Cadets are urged to review *Learn to Lead* chapter 8 during their preparations.

Format. A small audience of CAP cadets, seniors, parents, and other well-wishers will be on hand. No more than three visual aids are permitted, and these are limited to pictures, diagrams, graphics, statistical tables, short quotations, and the like. Text-heavy Powerpoint presentations are not permitted. Video and audio files are not permitted. NCC will provide the computer, projector, and screen; cadets will bring their files on a USB thumb drive.

Report-In. Cadets do not formally report-in for this event. The marshal will call each participating cadet to the podium, a few moments will be granted to cue visual aids (if needed), and then the chief judge will signal for the cadet to begin. Cadets will identify themselves by grade, first and last name, and team name before proceeding into the main portion of their presentation.

Conclusion Process. Cadets indicate their talk has concluded by saying, "That concludes my talk. Do you have any questions or remarks?" A brief Q&A with the judges will follow, and when completed, the judges dismiss the cadet, and the cadet exits the presentation area. If the cadet's talk runs over 11 minutes, the judges may direct the cadet to halt.

Impromptu: Cadets will have 10 minutes to prepare an impromptu talk of 2 to 3 minutes' duration. The challenge will simulate a realistic question a VIP guest might ask during a visit with cadets.[9] Speech topics are assigned randomly by the marshal. Cadets will be provided an index card and pen for notetaking and may refer to the card during their talk. For report-in and conclusion procedures, see the section on the extemporaneous speech above.

c. *Scoring*. The two portions of the event – the extemporaneous talk and impromptu talk – are scored separately, each using its own rubric, available in Appendix 2. The extemporaneous speech is weighed more heavily, with 100 possible points, versus the impromptu speech, with 60 possible points. Those two scores will be added together to produce a single score for each cadet. That sum is used to determine final rank order. Awards may be presented to the top performers and runners-up in each portion of the event.

9. Sample Impromptu Topics.

What is CAP doing to promote STEM?

Why do cadets wear a military-style uniform?

What could your hometown government do to support cadets?

3-2. MODEL ROCKETRY

a. *Objective.* This event promotes STEM learning and teamwork through model rocketry design, construction, launch, and measurement activities.

b. *Conditions*. This event will be governed by the Team America Rocketry Challenge (TARC) rules, available in the Appendix 3, with the modifications described below.

Overview. Each team will construct a single-stage model rocket at NCC, powered by class "F" or lower rocket motors. The rocket must carry an egg and altimeter as payload, and the egg must land undamaged. Scores are derived from flight duration and altitude data.

Equipment. NCC will provide the unassembled rocket kits, or teams may bring their own unassembled kit. NCC will also provide glue, X-Acto knives, a launch system, rocket motors, altimeter, and egg, or teams may bring their own equipment.

Training. It is recommended that teams train for this event by constructing, testing, and modifying rockets at their home unit to identify their best practices, and then at NCC build their rockets in accordance with their flight test data.

Rocket Construction. Teams will have at least two hours to assemble their rockets. Launches will occur ample time after assembly so that the glue has time to dry. Cadets may refer to notes developed during pre-NCC flight tests when they assemble their rockets at NCC.

Modifications. This event departs from the TARC rules as follows. First, all NCC cadets are eligible to participate, regardless of age or school grade. Second, there are no pre-qualifying flights required for a team to advance to NCC's model rocketry event, nor are teams required to officially register for the TARC, though they are encouraged to do so. Finally, the NCC event will include two or three launches, depending on the number of teams participating and the time available. As with the TARC rules, NCC teams use their "best" flight for scoring purposes.

c. *Scoring*. The TARC scoring criteria will be used, with raw scores converted to rank order points. See Appendix 3 for details on TARC scoring.

3-3. ROBOTICS

a. *Objective*. This event promotes STEM learning and teamwork through two robotic-themed activities. The first activity involves tele-operating a robotic vehicle and designing and executing a series of commands to guide a human rover over a simulated Martian surface. The second activity involves using a Texas Instruments graphing calculator to control a robotic vehicle.

b. *Conditions.*

Rover Races

Overview. This event is conducted using CAP's *Introduction to Robotics* guide, lesson 19, "Rover Races." Teams designate six cadets to compete in the event. The "robot" in this event is simulated – a cadet acts as the robot, and there is no robotic design or construction involved.

Equipment. Teams do not need any special equipment to participate in this event, but prior experience with lesson 19 in the *Introduction to Robotics* guide is essential.

Mission. Teams vie for the net shortest elapsed time, after imposing time penalties for "errors" (simulated encounters with obstacles).

Calculator-Controlled Robot

Overview. This event is conducted using CAP's *Introduction to Robotics* guide, lesson 21, "Calculator-Controlled Robots." Teams designate two cadets to compete in this event. Teams program a graphing calculator (numerous models will work, including the most popular models used in high school math classes) that controls a robotic vehicle that it sits atop. The team must program its robot to navigate a maze.

Equipment. Team will need to provide their own robotic vehicle and calculators. To be competitive in this event, teams will of course need to obtain their own robot kit ($99 via smallrobot.com) and graphing calculator ($60), and practice at the squadron prior to NCC.

Mission. Teams receive points for completing the maze, and extra points for retrieving a cube.

c. *Scoring.* Rank order subtotals are determined for each activity in this event, and then the two subtotals are combined to determine a final rank order. A single rubric is used; see Appendix 2.

3-4. PANEL QUIZ

a. *Objective*. This event requires teams to hit the books prior to competition. Cadets will show their knowledge of all things Civil Air Patrol aerospace, leadership, and cadet world. The quiz is generally a round-robin where you will put your team's knowledge against all other competition teams.

b. *Conditions.*

General. Whenever possible, the Panel Quiz event should be conducted as a round-robin tournament. Each team plays every other team once. The NCC will use four-person quiz teams. Each Panel Quiz will be conducted by a Moderator, who leads the proceedings and asks the questions, and a Judge, who serves as a timer, keeps the event on track, and is the final arbiter regarding the correctness of an answer. The moderator will brief each team concerning the rules.

Participation.

(1) Each team member on each team must participate in the Panel Quiz event.

(2) The tournament schedule will be provided to the individual teams with as much advance notice as possible.

Question Sources and Format.

(1) For the all-ranks class, the subject matter includes *Aerospace Dimensions; Learn to Lead,* volumes 1, 2, and 3*;* CAPR 60-1, *Cadet Program Management*; CAPP 60-31, *Cadet Staff Handbook*; cadet-related topics from CAPR 39-1, *Civil Air Patrol Uniform Regulation;* and AFMAN 36-2203, chapters 1 through 4.

(2) For the newcomer class, the subject matter is limited to *Aerospace Dimensions,* modules 1, 2, and 3; *Learn to Lead,* chapters 1 through 6; and general knowledge from the *New Cadet Guide.*

(3) Games that are conducted simultaneously (i.e., in the same round) may use the same question set. Questions used in any round should not be re-used in later rounds.

(4) Each question set consists of at least twenty-five questions (ten toss-ups, ten bonuses, and five or more tiebreakers) per round.

Format of a Panel Quiz Game.

(1) General

(a) A Panel Quiz game consists of a group of cadets (a "quiz team") from one team competing against a group of cadets from another team.

(b) A game consists of a maximum of 10 "toss-up" questions. The event staff may optionally impose a maximum time limit for each game (15-20 minutes is recommended). If any team has signaled to answer a toss-up question when time expires, that toss-up question and its bonus question will be completed. Otherwise, the question will be discarded.

(c) The Moderator will begin by explaining the rules (See Attachments for "Briefing Guide Before Each Round") and testing each buzzer to ensure proper operation. (d) Cadets are instructed to begin an answer only upon being recognized by the Moderator. Upon being so recognized, that cadet must begin their answer immediately.

(2) Game Flow (see Attachments, Panel Quiz Flowchart, as a guide). The Moderator will ask a toss-up question. Cadets buzz in to answer. Cadets do not have to wait for the complete reading of the toss-up question before buzzing in. If no one interrupts the reading of question to answer, then the Moderator will allow 10 seconds for either team to buzz in before moving on the next toss-up question.

(a)The Moderator will stop and identify the cadet who buzzed in first. The cadet should provide the answer immediately.

(1) Correct answers to the first 5 toss-up questions earn the team 10 points and a chance at a "bonus question" offered by the Moderator to their team only. The team may confer for up to 10 seconds before providing an answer. The last 5 toss-up questions are worth 15 points each.

(2) Correct answers to the bonus questions are worth 5 points each. The Moderator goes on to the next toss-up question.

(3) If the bonus answer is incorrect, there is no penalty, and the Moderator goes on to the next toss-up question.

(b) Incorrect answers to the first five toss-up questions will take 10 points from the team's score and incorrect answers to the last 5 toss-up questions carry a 15-point penalty. If the toss-up question is answered incorrectly by the first team to buzz in, then the toss-up question is re-read, in its entirety, for the other team, who will have 10 seconds to buzz in. A cadet who buzzes in within 10 seconds must answer immediately after being identified by the Moderator.

(1) If no one on the other team buzzes in within 10 seconds, the Moderator will move on to the next toss-up question.

(2) If a correct answer is given after the re-reading of the toss-up question, the responding team is given appropriate points. There is no bonus question. The Moderator will go on to the next toss-up question.

(3) If an incorrect answer is given after the re-reading of the toss-up question, the appropriate points are deducted from the responding team. The Moderator will go on to the next toss-up question.

(3) Answering Toss-up Questions.

(a) As a toss-up question is read, either team may signal their desire to attempt an answer at any time. If the question is read in its entirety and no signal is given, the Moderator will wait 10 seconds before going on to the next toss-up question.

(b) Once a team has signaled, the Moderator will stop reading the question, identify the individual who signaled, and request an answer.

(c) Only the person that signaled may answer a toss-up question. They must begin their answer immediately upon being recognized by the Moderator. Drawn out replies, restatement of the question, "essay-type" answers, and any other tactic used to delay an immediate response will be deemed "incorrect" and the team penalized 10 points in the first five questions (15 points in the last five).

. d) Any answer given by a member of either team without buzzing in will be ignored. If an answer (even if correct) is tendered by a member of the team that buzzed in before that member is recognized by the Moderator or

by a cadet other than the one recognized by the Moderator, the Moderator will state, “Incorrect” and penalize the team 10 points in the first five questions (15 points in the last five).

(e) No discussion is allowed on a toss-up question.

(4) Answering Bonus Questions.

(a) When a team answers a toss-up question correctly, they will be asked a bonus question. However, no bonus question will be asked if the other team previously responded to that toss-up question with an incorrect answer.

(b) Since only that team may answer a bonus question, the question will be read in its entirety.

(c) The team then has 10 seconds to discuss their answer and respond.

(d) A correct answer will earn the team five points.

(e) There will be no penalty for an incorrect answer. The other team will not have an opportunity to answer.

(5) Breaking Game Tie. If the game ends in a tie, the tiebreaker questions will be asked until the tie is broken. These questions will be worth 15 points for toss-up questions and 5 points for bonus questions.

(6) Challenges. The NCC Staff has instituted a mechanism whereby teams may challenge questions and/or answers. These procedures are outlined in the Judges' Briefing Notes (See Attachment 1) and may be supplemented or modified by the NCC Staff provided advance notification is provided to all teams.

c. *Scoring.*

(1) The Panel Quiz rank order score will be based on the number of games each team won.

(2) If two (or more) teams have the same number of wins at the completion of the tournament, the numerical scores derived from all games completed by the tied teams will be totaled to determine the rank order position for those teams. Teams still tied after this step will receive relative rank orderings as described in section “1-7. Scoring & Awards.”

3-5. OBSTACLE COURSE OR FITNESS COURSE

a. *Objective*. This event combines physical fitness, teamwork, and problem solving in a high adventure environment.

b. *Conditions*.

Team Size. Teams participating in this event must enter at least three cadets, but the other cadets may participate in a non-competitive or “just for fun” status. Competitors and non-competitors are assigned to separate heats.

Course. If a formal, professionally engineered obstacle course is available, cadets will work through all assigned obstacles as a team. Each competitor must successfully conquer a given obstacle before the team moves on to the succeeding obstacle, lest they be assessed a penalty. Cadets may help one another through the obstacles.

Missed Obstacles. If for some reason, a competitive team is unable to conquer a given obstacle, it may move on to the next obstacle, at significant penalty. See scorecard for details.

Safety Precautions. Obstacle courses are high adventure activities that must be conducted IAW CAPR 60-2, *Cadet Protection Program*. The NCC staff will facilitate a walk-through with all participants.

Fitness Circuit Alternative. If a professionally engineered obstacle course is unavailable, the NCC staff will develop a fitness circuit consisting of multiple stations of calisthenics or physically challenging tasks (log carries, jump ropes, tire runs, hurdles, slaloms, etc.).

Physical Fitness Category Modifications. Cadets of any physical fitness category are eligible to compete in this event if they are medically able to do so. However, no modifications will be made to the tasks required or scoring criteria.

c. *Scoring*. This event is scored primarily by measuring elapsed time, with penalties assessed for missed obstacles. Raw scores are converted to rank order points.

3-6. DIRECTION FINDING COURSE

a. *Objective*: Locate ELT.

b. *Conditions*:

(1) This event should be conducted in the field. Or at least in an area outdoors which allows enough room to use equipment.

(2) REF: CAPP2 CAP ELT/EPIRB Search

(3) *Participation*. All cadet team members are eligible to participate.

c. Scoring: This event is scored based on the elapsed time to find the ELT, with penalties assessed for ELTs not found. Raw scores are converted to rank order points.

3-7. PRE-COMPETITION SERVICE PROJECT

a. *Objective*. This event encourages volunteerism and the development of leadership skills through service learning. The development of public speaking skills is a secondary objective.

b. *Conditions*.

Participation. The service project itself must be conducted prior to NCC by the entire team. Teams may deliver presentations on any service project(s) they (the 6 members of the team) conducted as unit activities during the previous 12 months. Community service conducted by individual cadets outside of CAP (i.e.: Key Club, scouting, religious organizations) are not eligible.

Report-In. Cadets do not formally report-in for this event. The EM will call the cadets to the podium, they'll have a few moments to cue their visual aids (if needed), and then the chief judge will signal for them to begin. The cadets will identify themselves by grade and first and last names, and their team name before proceeding into the main portion of their presentation.

Presentation Task. Two cadets represent the team and deliver a pre-planned presentation that explains to a panel of judges what their service project entailed and summarizes the project's impact and what the cadets themselves learned in the process. The presentation's content should address the items included on the presentation scorecard. A small audience of CAP cadets, seniors, parents, and other well-wishers may be on hand.

Visual Aids. A maximum of seven visual aids are permitted, and these are limited to pictures, diagrams, graphics, statistical tables, brief quotations, and the like. Text-heavy PowerPoint presentations are not permitted. Video and audio files are not permitted. NCC will provide the computer, projector, and screen; cadets will bring their files on a USB thumb drive.

Time Requirements. A maximum of ten minutes is allowed for the presentation. Judges may direct cadets to halt their presentation if it exceeds 11 minutes.

Conclusion Process. Cadets indicate their presentation has concluded by saying, "That concludes our presentation. Do you have any questions or remarks?" A brief Q&A with the judges will follow, and when completed, the judges dismiss the cadets, and the cadets exit the presentation area.

c. Scoring. A single rubric, available in Attachments, is used to score this event. Raw scores are converted to rank order points.

3-8. UAS--UNMANNED AIRCRAFT SYSTEM (DRONE) EVENT

a. *Objective*. This activity promotes STEM learning through two activities; 1) Written test covering subjects contained in the FAA's Remote Pilot Written Exam (Part 107) and 2) Indoor, RC, line of sight flying of a basic quadcopter.

b. *Conditions.*

Participation. The intent is for all 6 team members to participate; Four team members take the written exam, and two other team members fly the quadcopter.

Event 1- Written Exam.

Overview. The written exam is a multiple-choice test where the cadet has 60 minutes to answer 50 questions covering topics from the FAA's Airman Certification Standards for Remote Pilot (FAA-S-ACS-10A). These topics include Regulations, Airspace & Requirements, Weather, Loading and Performance and Operations. Four cadets from the team will take the written exam and their scores (each correct question is worth 2 points) will be averaged for a team score. There are 2 versions of the test with each team getting 2 of each of the versions.

Event 2 - Remote control, line of sight, search and rescue course challenge

Overview. Teams will compete by flying their UAS through a simulated search and rescue course. Their attempts will be timed with penalties (time added to their actual course time) for specific rule violations.

Equipment. The teams will compete with Hubsan X-4 drone acquired from NHQ through the AE STEM Kit. No modifications are permitted to the drone or controller. Teams are permitted to purchase their own replacement batteries and propellers provided they are exactly the same as the original batteries (in mah) and propellers (in

length and pitch). Teams may purchase upgraded battery chargers (such as the type which charge 6 batteries at once) and battery voltage checkers at their own expense and discretion. Teams must fly with the blade protection accessory attached.

Team prep. Teams are required to show up at the site with their own drones and transmitters. They must also have their own batteries for the transmitters and the drones. (The transmitters use AAA-style batteries, and the drone batteries can be carried aboard commercial aircraft ***(they cannot be in checked baggage).***

Mission. The course will be an indoor course adjusted to the size of the room (typically the size of a high school basketball gymnasium). The flight is expected to be conducted by line of sight (no First-Person-View FPV allowed) and will encompass flying search grid patterns with the drone required to maintain orientation to direction of travel (the front of the drone must generally face the direction the drone is traveling). A landing will be required to be executed at a specific spot, with distance from bullseye resulting in time penalty. Two team members are each given one chance to fly the course. Their completion times, plus any penalty times, are averaged for a team score. The fastest team receives 1 point, the second fastest receives 2 points, the third fastest team receives 3 pts, etc.

Flying Course Setup.

(1) Location. The course should be in a room about the size of a basketball court with 2 stories of altitude available.

(2) Course boundary. The course boundary should be marked off with blue painter's tape and should provide at least 5 feet clearance from the walls.

(3) Pilot's station. An area about 5-foot square should be marked off for the pilot and visual observer to be in when they are flying the course. This station should be at one end of the course, opposite where the landing site will be.

(4) Landing site. An elevated landing platform should be made from a 3" piece of PVC with the top covered to create s suitable landing platform for the drone. It should be about 1' off the floor. Alternatively, a 3" circle can be marked on the floor and a tape measure used to measure the closest part of the drone to the circle.

(5) Course lanes and obstacles. Each lane of the course should have a vertical marker about 5' tall to serve as a pylon to be flown around at the end of each "leg." Other course obstacles made from PVC and pool noodles will simulate obstacles which may be encountered in a search area; towers, trees, etc.

(a) Constructing *Obstacles and Gates*

1. End of lane marker. This is a 5'tall pvc pipe covered with a pool noodle or brightly painted and placed at the end of each leg to make the point where the drone will change directions.

   Materials required:

   1 - 10'x1" pvc pipe
   4 - 90^{o} connectors
   3 - "T" connectors
   1 - pool noodle or paint

   To build:

   (a) Cut the 10' pipe into to two 5' sections
   (b) Cut one 5' section into 5-1' sections
   (c) Cut 3 of the 1' sections into 6" sections
   (d) Build the base

   1. Put the 90^{o} connectors onto the end of the 2 1' sections place them opposite of each other.

   2. Put the 6" pipes into the thru portions of the "T" fittings and connect them to the two sections from step 1. The openings of the "T" fittings should face each other toward the center of the square.

   3. The remaining 6" pipes are put onto the remaining "T" fitting and fitted to the openings of the previously assembled square with the "T" fitting opening in the center and facing upward.

   4. Place the 5' pvc pipe into the opening of the "T" fitting in the middle. Cover with pool noodle or paint with bright colored paint.

2. Make a gate. Two 5' poles can be put together to form an "gate" requiring the drone to be flown between them.

3. Circle Gate. This can be made for the drone to be flown thru. It can be made more challenging by making the circle various degrees from vertical by rotating the fittings/pool noodle:

Materials required:

2 - 10'x1" PVC pipe

6 – 90^{o} connectors

4 - "T" fittings

2 - pool noodles

To build the base

(a) Cut one 10' pvc pipe into five 2' sections

(b) Cut two 2' sections into 1' sections

(c) Put 90^{o} connectors onto the ends of two of the 2' pvc pipes

(d) Put two 1' sections onto each thru opening of two of the "T" connectors

(e) With the parts from steps c and d, make a square with the two "T" connections on the opposite sides from each other and their openings pointing upward.

To finish the circle gate

(a) Cut one 10' section of PVC pipe into two 1' sections, three 2' sections, six 4" sections

(b) Put one of the 1' sections into each "T" fitting on the base

(c) Cap each 1' section with a "T" fitting, with their thru openings going up and the 3rd openings facing each other

(d) Insert a 2' section into the "T" fittings

(e) Put two 2' sections into the "T" fittings

(f) Top off the 2' sections with 90^{o} connectors

(g) With the remaining "T" Connectors, put 4" pvc pipe into each opening

(h) Put the perpendicular opening of the "T" fitting into the 90^{o} connector opening

(i) Connect pool noodles to the 4" sections coming from each "T" fitting

c. *Scoring*. This is a timed and penalty event. The base measurement is the time from when the timer says "GO!" until the drone is landed at the landing site. Penalties (amount of time TBD) are added for:

Going over 6' from the floor

Failing to execute an obstacle (not going thru the circle or between the gates)

Hitting the floor

Crashing requiring the observer to come on the course and right the drone to complete flying

Failing to land on the elevated platform or the number of inches the drone was away from the landing circle

Each team's written average scores are added to their course average scores to determine placement in the event.

ATTACHMENT 1

CORE EVENT SCORECARDS

NCC INDOOR POSTING

TEAM:_____

Item	Marginal	Fair	Very Good	Excellent	
PREPOST					
1. Report-in (crisp, clean, professional)					
Points per mark	0	1	3	5	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					
POSTING SEQUENCE					
2. Drill movements (turns, cadence, alignment)					
3. Manual of arms (unity, alignment, positioning)					
4. Obstacle avoidance (efficient route, no bumps)					
5. Flag handling (posting, smoothing)					
6. Honors (to audience, to flag)					
Points per mark	0	4	7	10	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					
RETRIEVAL SEQUENCE					
7. Drill movements (turns, cadence, alignment)					
8. Manual of arms (unity, alignment, positioning)					
9. Obstacle avoidance (efficient route, no bumps)					
10. Flag handling (posting, smoothing)					
Points per mark	0	4	7	10	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					

OBJECTIVE CONFORMITY WITH FLAG PROTOCOL	Major Error	Minor Error	No Errors	
11. US flag position during posting sequence				
12. US flag position during retrieval sequence				
Points per mark	-20	-10	0	
Marks per column				Subtotal (negative)
(Multiply) Subtotal: Points for column				

Only the Chief Judge allots penalties

Grand Total
(Sum of column subtotals from above)

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC OUTDOOR POSTING

TEAM:

Item	Marginal	Fair	Very Good	Excellent	

PREPOST

1. Report-in (crisp, clean, professional)
2. Drill during March-on (alignment, cadence, turns)

Points per mark	0	2	4	7	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					

RAISING, LOWERING & FOLDING SEQUENCES

3. Rope handling (smooth, purposeful, secure)
4. Flag handling (smooth attachment, smooth securing)
5. Raising & lowering (smooth flow, up briskly, down solemnly)
6. Folding (smooth flow, cadence, purposeful movements)
7. Strategy (efficient, well-planned, maintains military bearing)

Points per mark	0	4	8	12	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					

8. Drill during march-off (alignment, cadence, turns)

Points per mark	0	4	7	10	
Marks per column					
(Multiply) Subtotal: Points for column					

9. Appearance of folded flag

Points per mark	0	6	10	16	Subtotal

Only the Chief Judge allots penalties

OBJECTIVE CONFORMITY WITH FLAG PROTOCOL

10. US flag first hoisted to full staff, then lowered to half-staff
11 US flag re-hoisted to full staff, then lowered and retrieved
12. 3-cadets used for raising, 4-cadets for lowering flag

	Major Error	Minor Error	No Errors	
Points per mark	NA	-5	0	
Marks per column				Subtotal (negative)
(Multiply) Subtotal: Points for column				

13. Flag decorum (kept off ground, Union on top for raising)

				Subtotal (negative)
Points per mark	-10	-5	0	

14. Halyards secured
15. Folded US flag presented to chief judge

Points per mark	NA	-5	0	
Marks per column				Subtotal (negative)
(Multiply) Subtotal: Points for column				

GRAND TOTAL Sum of column subtotals — Grand Total

Notes: Please let the team know what they did well and where they could improve. Use back to record.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC COLOR GUARD STANDARD DRILL

TEAM:

Item	Marginal	Fair	Very Good	Excellent
PERFORMANCE OF COMMANDS & PRECISION				
1. In-place commands & Posture: crispness, precision				
2. Marching, Cadence: sharpness, discipline, speed, consistency				
3. Turning movements: steady cadence,				
4. Alignment & Uniformity: all together				
	0	5	8	15
Points per mark				
Marks per column				
(Multiply) Subtotal: Points for column				

Subtotal

MILITARY BEARING				
5. Voice Commands: crisp together				
6. Flag procedures: control				
7. Poise: spirit, recovery				
Points per mark	0	3	6	10
Marks per column				
(Multiply) Subtotal: Points for column				

Subtotal

PENALTIES

Time:

Only the Chief Judge allots penalties

8. Movements out of sequence or omitted (use table below)		
9. Boundary Violation		
10. Done in less than 2min 30 sec		
Points per mark	-3	0
Marks per column		
(Multiply) Subtotal: Points for column		

Subtotal

Command	Yes	No	Command	Yes	No	Command	Yes	No
1. Order Arms			10. Forward March			19. Left About		
2. Order Colors			11. Half Left About			20. Forward March		
3. Parade Rest			12. Forward March			21. Half Left About		
4. Attention			13. Right About			22. Forward March		
5. Carry Colors			14. Forward March			23. Eyes Right		
6. Present Arms			15. Half Right About			24. Ready Front		
7. Order Arms			16. Forward March					
8. Forward March			17. Half Right About					
9. Half Left About			18. Forward March					

GRAND TOTAL Sum of column subtotals

Grand Total

Notes: Please let the team know what they did well and where they could improve. Use back to record.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC ELEMENT STANDARD DRILL

TEAM:

Item	Marginal	Fair	Very Good	Excellent
PERFORMANCE OF COMMANDS & PRECISION				
1. In-place commands & posture: crispness, precision				
2. Marching, Cadence: sharpness, discipline, speed, consistency				
3. Turning movements: steady cadence,				
4. Alignment & Uniformity: all together				
	0	5	8	15
Points per mark				
Marks per column				
(Multiply) Subtotal: Points for column				

Subtotal

MILITARY BEARING				
5. Voice Commands: crisp together				
6. Team Commander: control, situational awareness				
7. Poise: spirit, recovery				
Points per mark	0	3	6	10
Marks per column				
(Multiply) Subtotal: Points for column				

Subtotal

Time:

PENALTIES

8. Movements out of sequence or omitted (use table below)		
9. Boundary Violation		
10. Done in less than 2min 30 sec		
	-3	0
Marks per column		
(Multiply) Subtotal: Points for column		

Only the Chief Judge allots penalties

Subtotal

Command	Yes	No	Command	Yes	No	Command	Yes	No

Insert commands from unpublished list into table to ensure all commands are given in order. Movements may be intermixed with transitional commands.

Grand Total

GRAND TOTAL Sum of column subtotals

Notes: Please let the team know what they did well and where they could improve. Use back to record.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC TEAM LEADERSHIP PROBLEM

TEAM:

PLANNING PHASE	Marginal	Satisfactory	Excellent	
1. Full participation vs. domineering individual(s)				
2. Concerted attempt to use logic, creativity				
3. Consideration of multiple solutions				
Points per mark	2	6	10	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

EXECUTION PHASE				
4. Speed (elapsed time:)				
5. Evidence of teamwork in execution				
Points per mark	3	8	15	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

MISSION ASSESSMENT				
6. Fulfilled the problem's objective criteria				
Points per mark	8	15	30	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

Only the Chief Judge allots penalties

PENALTIES	Major (each)	Minor	None	
7. Process violations				
Points per mark	- 10	- 5	10	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

GRAND TOTAL Sum of subtotals | Grand Total

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC UNIFORM INSPECTION (PREPARATION PHASE) TEAM:

Item		Unsatisfactory	Good	Excellent	
GARMENTS					
1. Press					
2. Cords, loose strings, lint					
	Points per mark	0	1	3	
	Marks per column				Subtotal
	(Multiply) Subtotal: Points for column				

		2_> Errors	_1	Perfect	
REQUIRED ACCOUTREMENTS					
3. Uniform includes all assigned accoutrements					
	Points per mark	0	2	8	
	Marks per column				Subtotal
	(Multiply) Subtotal: Points for column				

		Unsatisfactory	Good	Excellent	
ACCOUTREMENT PLACEMENT					
4. Grade insignia					
5. Nameplate					
6. Ribbons (location of stack)					
7. Ribbon order					
8. Badges and/or wings					
9. Flight cap device or grade insignia					
	Points per mark	0	2	5	
	Marks per column				Subtotal
	(Multiply) Subtotal: Points for column				

		Unsatisfactory	Good	Excellent	
REPORTING					
10. Report-In					
11. Report-Out					
	Points per mark	0	1	3	
	Marks per column				Subtotal
	(Multiply) Subtotal: Points for column				

Grand Total

GRAND TOTAL Sum of subtotals

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC UNIFORM INSPECTION (SPOT INSPECTION)

CADET:

TEAM:

Item	Unsatisfactory	Good	Excellent	
PERSONAL APPEARANCE				
1. Cleanliness, cosmetics, jewelry				
2. Haircut, hairstyle, shave, barrettes / combs				
3. Posture & military bearing				
Points per mark	0	3	6	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

	Unsatisfactory	Good	Excellent	
APPAREL				
4. Press				
5. Cords, loose strings, lint				
6. Fit, hem				
7. Shoe shine				
Points per mark	0	4	7	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

	Unsatisfactory	Good	Excellent	
ACCOUTREMENT PLACEMENT				
8. Grade insignia				
9. Nameplate				
10. Ribbons (location of stack)				
11. Ribbon order				
12. Badges and/or wings				
13. Flight cap device or grade insignia				
Points per mark	0	3	7	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

	Unsatisfactory	Good	Excellent	
REPORTING & STANDARDIZATION				
14. Report-In				
15. Standardization of appearance				
16. Report-Out				
Points per mark	0	2	4	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

Grand Total

GRAND TOTAL Sum of subtotals

Notes: Please let the team know what they did well and where they could improve. Use back to record.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC PHYSICAL FITNESS TEST

PERSONAL DATA	EVEN	QTY / TIME	POINTS	MEDICAL EXEMPTION
CAPID	PUSH UPS			
AGE	CURL UPS			
GENDER	SIT AND REACH			
CATEGORY	MILE RUN or			
	PACER			

GRAND TOTAL Sum of percentile points

Recorder's Printed Name_____Recorder's Signature_____

NCC SPORTSMANSHIP MODIFICATION TEAM:

MOTION TYPE

_____ Admirable conduct

_____ Infraction or unacceptable conduct

SPONSOR

Proposed by _____

SYNOPSIS OF JUDGES' OBSERVATIONS & RATIONALE

CO-SPONSOR

Seconded by _____

PENALTY / BONUS

_____	Admirable conduct	-1 point subtracted from the *Rank Order Subtotal*
_____	Moderate infraction	+1 point added to the *Rank Order Subtotal*
_____	Unacceptable conduct	+3 to +10 points added to the *Rank Order Subtotal*

Note that bad sportsmanship, represented by infractions, adds points, while good sportsmanship, represented by admirable conduct, subtracts points. This is because the most outstanding overall team is that which earns the lowest amount of rank order points.

Initials of Sponsor & Cosponsoring Judges

GRAND TOTAL

ATTACHMENT 2

NON-CORE EVENT SCORECARDS

NCC EXTEMPORANEOUS SPEECH

TEAM:

CADET:

Item	Marginal	Fair	Very Good	Excellent	
ORGANIZATION					
1. Introduction: wins attention, clear purpose, previews argument					
2. Body: points well-organized, easy to follow, factually correct					
3. Conclusion: decisive & effective					
4. Grammar, vocabulary					
Points per mark	0	2	5	8	Subtotal
Marks per column					
(Multiply) Subtotal: Points for column					
CONTENT					
5. Rhetoric: examples, restatements, analogies, support for claims					
6. Argument: engages other viewpoints in their strongest form					
Points per mark	0	4	9	14	Subtotal
Marks per column					
(Multiply) Subtotal: Points for column					
DELIVERY					
7. Eye contact, control of nerves					
8. Posture, gestures, non-verbals					
9. Voice: pitch, volume, speed					
10. Q&A: answers direct questions, stays on message, poise					
11. Extemporaneous delivery: minimal use of notes, not from rote					
Points per mark	0	2	5	8	Subtotal
Marks per column					
(Multiply) Subtotal: Points for column					

ELAPSED TIME	> 21 sec.	≤ 20 sec.	_ On Time	
12. Fail to meet minimum time				
13. Exceed maximum time				
Points per mark	-5	-3	0	
Marks per column				Subtotal (negative)
(Multiply) Subtotal: Points for column				

Only the Chief Judge allots penalties

GRAND TOTAL Sum of column subtotals — Grand Total

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

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Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC IMPROMPTU SPEECH

TEAM:

CADET:

Item	Marginal	Fair	Very Good	Excellent	
ORGANIZATION					
1. Introduction: wins attention, clear purpose					
2. Body: points well-organized, easy to follow, factually correct					
3. Conclusion: decisive & effective					
Points per mark	0	2	5	6	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					
CONTENT					
4. Style: personalized, not pro-forma					
5. Task accomplishment: fulfills the task assigned, gets job done					
Points per mark	0	4	9	9	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					
DELIVERY					
6. Eye contact, control of nerves					
7. Posture, gestures, non-verbals					
8. Voice: pitch, volume, speed					
9. Impromptu delivery: minimal use of notes, not from rote					
Points per mark	0	2	5	6	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					

ELAPSED TIME	> 15 sec.	≤ 15 sec.	_ On Time	
10. Fail to meet minimum time				
11. Exceed maximum time				
Points per mark	-5	-3	0	
Marks per column				Subtotal (negative)
(Multiply) Subtotal: Points for column				

Only the Chief Judge allots penalties

GRAND TOTAL Sum of column subtotals — Grand total

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCCC ROBOTICS **TEAM:**

Item

ROVER RACES

Time Subtotal

1. Raw elapsed time
2. Penalties for obstructions

Penalty Points:

1 Point Penalties *(make a mark on the appropriate line when a violation occurs)*

Each step taken off course: _____

If the rover steps over the line at all it is one point and then another point for each step taken until both feet are back inside the course.

Repeating a command more than once: _____

Failing to use the word stop at the end of each command: _____

1 point for each occurrence

For instance, the driver fails to put stop at the end of the command he issues, that will result in 3 points as each relay will not have stop at the end of their command (if they notice the driver failed to do it and they add it, it is still a penalty because they did not repeat the command verbatim.
If only the Rover Relay forgets to say STOP, then that would only be 1 point

Total 1 pt Penalties

Failing to properly execute anomaly solution: _____

2 Point Penalties

Repeating a Command (each occurrence): _____

Using more than 10 words in a snapshot message or including other than position/orientation information in the message: _____

Total 2 pt Penalties x 2

Add total penalties (1 minute for each penalty point) to the raw elapsed time for the total Rover Score

Total Rover Penalty Points

Only the Chief Judge allots penalties

Total Rover Score

CALCULATOR-CONTROLLED ROBOT

3. Robot retrieves cube and returns it to start	4 pts
4. Robot retrieves cube and spins in circle for joy	3 pts
5. Robot navigates maze but misses cube	2 pts
6. Robot makes it only halfway through maze	1 pt

Final Total Calculator Robot

Team Rank Rover Races: _____

Team Rank Calculator-Controlled Robot: _____

Total Rank Points:

Judge's Printed Name_____

Judge's Signature _____

Are you the Chief Judge? (Circle one) Yes No

Final Robotics Rank:
(Lowest score is 1st, next is 2nd, etc.)

NCC OBSTACLE COURSE / CIRCUIT TEAM:

1. Total Elapsed Time:

2. Obstacles completed improperly, with fouls
3. Obstacles not completed successfully

	≤2 Cadets	1 Cadet	_ No Errors	
Penalty seconds per mark	+50 sec.	+20 sec.	0	
Marks per column				Subtotal
(Multiply) Subtotal: Points for column				

Only the Chief Judge allots penalties

GRAND TOTAL Sum of column subtotals | Grand Total

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC DIRECTION FINDING TEAM:

Item	Quantity
1. ELTs not successfully identified	

Penalty seconds per mark + 2 min

Penalty Subtotal

Raw Elapsed Time _____

Only the Chief Judge allots penalties

Net Elapsed Time

GRAND TOTAL Sum raw elapsed time and penalty subtotal

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

NCC SERVICE PROJECT

TEAM:

Item THE SERVICE-LEARNING PROJECT	Marginal	Fair	Very Good	Excellent	
1. Project scope *complexity, inter-agency cooperation, financial commitment*	0	6	14	20	
2. Project impact *effect on community, ability to repeat or grow project, publicity & acclaim*	0	6	14	20	
3. Skill set *use of special skills or knowledge unique to cadets, vs. youth in general*	0	4	7	10	
4. Creativity *uniqueness of the idea itself; creativity in execution*	0	1	3	5	
5. Time & effort *duration (single day or multi-day), total labor, participation squadron-wide*	0	4	7	10	
6. Evidence of learning *leadership or character formation; operational lessons learned*	0	5	10	15	
			Add scores from this section		Subtotal
PRESENTATION SKILLS					
7. Organization					
8. Voice clarity & volume					
9. Eye contact & non-verbal expressions					
10. Poise and confidence					
Points per mark	0	1	3	5	
Marks per column					Subtotal
(Multiply) Subtotal: Points for column					

REPORT-IN & REPORT-OUT	Major Error	Minor Error	No Errors	
11. Report-in with grade, name, team				
12. Conclude within 10 min. (before Q&A)				
Points per mark	-5	-3	0	
Marks per column				
(Multiply) Subtotal: Points for column				

Only the Chief Judge allots penalties

GRAND TOTAL Sum of column subtotal

Grand Total

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

UAS - UNMANNED AIRCRAFT SYSTEMS (DRONE) EVENT TEAM:

Item

1. Elapsed Time: _____:_____
Minutes : Seconds

2. Penalties

(a)Going over 6' from the floor
# of times drone went over 6' above the floor: _____ times 5 seconds _____:_____

(b) Failing to execute an obstacle (not going thru the circle or between the gates)
# of failed obstacles _____ times 20 seconds _____:_____

(c) Hitting the floor
# of times drone touched the floor: _____ times 10 seconds _____:_____

(d) Crashing requiring the observer to come on the course and right the drone to complete flying
# of times observer had to right the drone: ____ times 30 seconds _____:_____

(e) Failing to land on the elevated platform or the number of inches the drone was away from the landing circle/bullseye
Failing to land on the elevated platform add 45 seconds ***or*** _____:_____
# of inches the closest part of the drone is from the bullseye
(if elevated platform not used) _____ inches times 20 seconds

Total Time of Penalties: Only the Chief Judge allots penalties _____:_____

Add penalties to elapsed course time for total score.

GRAND TOTAL Sum raw elapsed time and penalty subtotal

Grand Total

Notes: Please let the team know what they did well and where they could improve. Use back to record, if needed.

Judge's Printed Name_____Judge's Signature_____

I am the Chief Judge for this event. (Circle one) Yes No

ATTACHMENT 3

PANEL QUIZ PRE-ROUND BREIFING

Brief to every team prior to every round.

1. Welcome to panel quiz challenging Teams _____ & _____. My name is _____ and our scorekeeper is _____.

2. Cadets, relax for a minute while I remind you and the audience of the rules.

3. [Ensure the correct teams are represented. Know which is on the left and right].

4. [Have the cadets test their buzzers, one at a time]. If your buzzer fails during the round, raise your hand, and let us know.

5. Toss-Ups questions test your "rapid-recall." Some things to remember:

   a. We'll know if you were the first to buzz-in as indicated by the light on your buzzer.

   b. When I verbally recognize you, you must answer immediately. In other words, no drawn-out answers and no restatements of the question are allowed. Answer after I recognize you and only after I recognize you. If you shout out an answer before being recognized, even if you were the first to buzz in and your response was correct, the answer will be scored as incorrect.

   c. Teammates cannot discuss a toss-up question or answer. The response must come from the person I recognize.

   d. Answer correctly and your team earns 10 points in the first five questions, 15 points in the last five questions. Answer incorrectly and your team loses 10 points in the first five questions, 15 points in the last five questions, and the other team gets a chance to answer it. If you buzzed in prior to my completing the question, I will state the question in its entirety for the other team.

6. If you are the first to buzz-in for a toss-up question and answer it correctly, your team will get a bonus question.

   a. After I state the question, your team will have 10 seconds to discuss your response.

   b. Before those 10 seconds expires, the team must begin its answer to the question. One cadet will answer for the team.

   c. A correct answer earns the team 5 points, and there is no penalty for an incorrect answer.

7. We will not respond to any protests during the round. If anyone wishes to challenge an aspect of this panel quiz round, the team commander may act in compliance with §1-7.

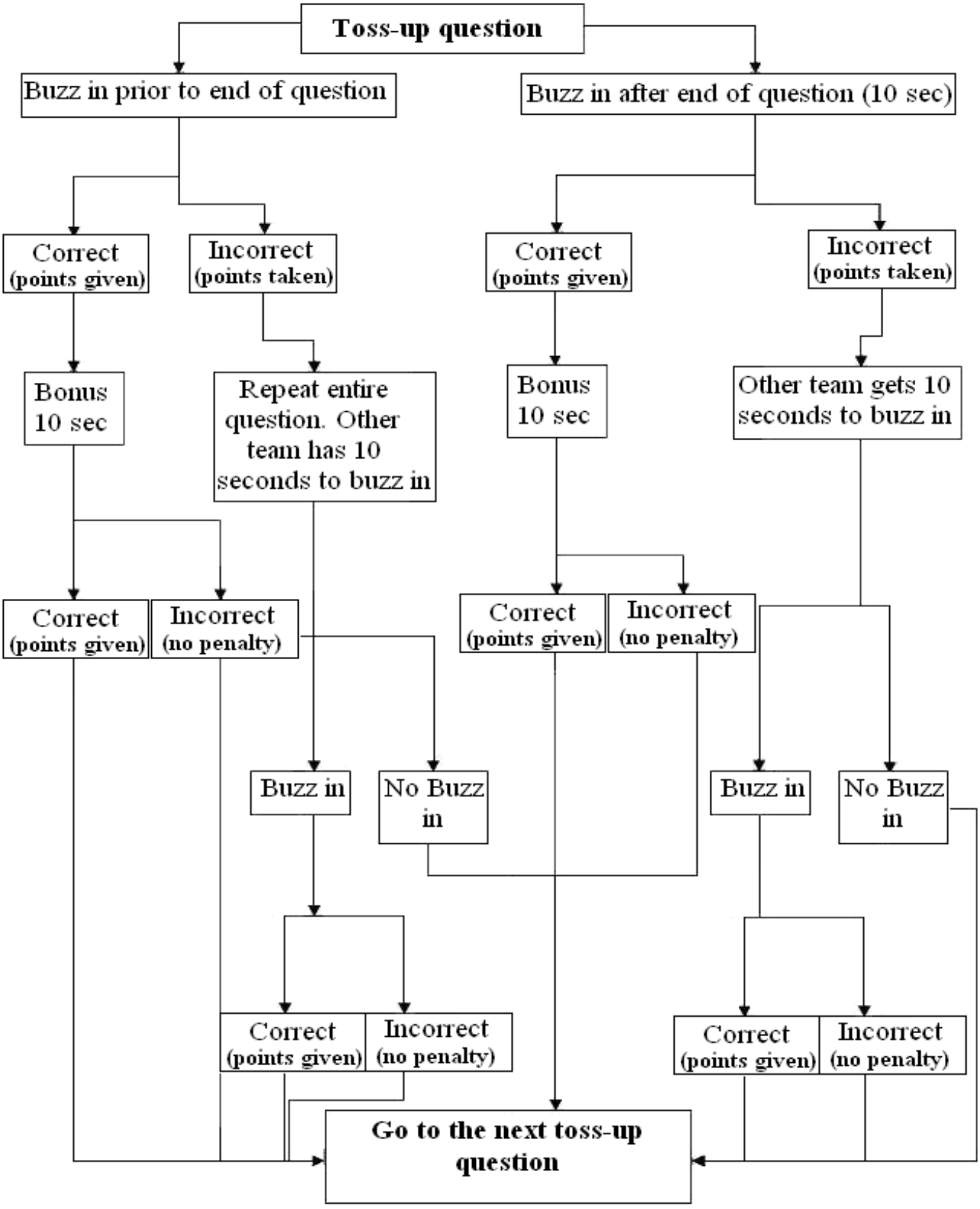
8. Spectators, please refrain even from whispering. If we hear a spectator's voice, I'll be forced to disqualify their team. No recording devices are allowed in this room. And, if you have a beeper, cell phone, etc., please turn it off now. Once the round starts, you may not disturb the cadets by leaving the room. Thank you.

9. Any questions?

10. Cadets relax, take a deep breath, and get ready to begin.

ATTACHMENT 4

PANEL QUIZ GAME FLOW DIAGRAM



ATTACHMENT 5

ROVER RACE DRIVER'S SHEET

TEAM NAME: _____ DRIVER'S NAME: _____

1. You will be given a mission by the Head Judge.

2. You will have 10 minutes to measure the course and draft your command list.

3. You will be provided a sample command list. You may issue any command (even if it is not on the list) as long as the command is less than 5 words and it ends in STOP (the word stop does not count, but numbers count as words).

   a. You may only say a command once and may only say it to the Driver Relay,

   b. The mission is timed, and the mission ends when the rover crosses the finish line or 30:00 whichever occurs first.

4. Your Command List:

TEAM NAME: _____ DRIVER'S NAME: _____

1._____	11. _____	21. _____
2._____	12. _____	22. _____
3._____	13. _____	23. _____
4._____	14. _____	24. _____
5._____	15. _____	25. _____
6._____	16. _____	26. _____
7._____	17. _____	27. _____
8._____	18. _____	28. _____
9._____	19. _____	29. _____
10._____	20. _____	30. _____

ATTACHMENT 6

NCC CHALLENGE FORM

TEAM:

DATE & TIME NLT 1 hour after event or discovery	**RECEIVER'S INITIALS** (NCC Staff)
EVENT	**C/CC NAME**

CITATION
Cite the CAP regulation or NCC rules violated; include paragraph number

SUMMARY Briefly explain the situation affecting your team. Be factual and do not include unsupported opinions.

ATTEMPTS TO RESOLVE If applicable, describe any efforts your team has already made to resolve this matter.	**DESIRED REMEDY** Describe what remedy your team proposes to resolve this matter. Be specific.

SECTIONS BELOW THIS LINE ARE FOR NCC STAFF USE

MOOT or RELEVANT CHALLENGE? Challenges have standing only if they could alter 4th place or higher in a given event	☐ **Relevant challenge** ☐ **Moot issue**	**UNSPORTSMANLIKE CONDUCT** Frivolous challenges and disrespectful conduct toward judges or fellow competitors may result in a Sportsmanship Modification	☐ **Fair complaint** ☐ **Unsportsmanlike complaint**

OUTCOME

OUTCOME ANNOUNCED TO TEAM COMMANDERS ☐ **Completed**	