



NATIONAL INTERCOLLEGIATE
FLYING ASSOCIATION



ESTABLISHING
**A NATIONAL
INTERCOLLEGIATE
FLYING ASSOCIATION**
FLIGHT TEAM



www.nifa.aero



INTRODUCTION TO NIFA

Welcome to the National Intercollegiate Flying Association (NIFA). Your interest in NIFA sets your school apart in the ever-increasing and competitive world of aviation instruction. Participating in NIFA competitions gives your students an increased potential for success in the constantly evolving and competitive world of aviation.

The purpose of this document is to help guide member institutions, advisors, and coaches in the process of starting a flight team with NIFA. While not exhaustive, this information will set a good foundation for potential success in the NIFA competition space. As questions come up, please feel free to reach out to your NIFA Region Representative using the link in the sections below or go to <http://www.nifa.aero>.

NIFA'S MISSION STATEMENT

The National Intercollegiate Flying Association was formed for the purposes of developing and advancing aviation education; to promote, encourage and foster safety in aviation; to promote and foster communications and cooperation between aviation students, educators, educational institutions and the aviation industry; and to provide an arena for collegiate aviation competition.

In short, NIFA promotes safety, education, and excellence through competition amongst the top collegiate flight teams in the country.

Participation in NIFA events has the real potential to develop a student's technical knowledge, improve their stick and rudder skills, and provide many networking opportunities with sponsors and volunteers who have direct experience and connections in the aviation industry.

These competitions are all about SAFETY.

There will be NO aerobatics, formation flying, or any maneuvers that push the limits of the aircraft or aviators. These competitions are designed to evaluate that the competitor can operate the aircraft with safety and precision.



NIFA LEADERSHIP

NIFA is led by a Board of Directors known as the NIFA Council. The Region and Student Representatives are elected by the NIFA membership, while the Executive Leadership, Members at Large, Managers/Directors and Council Members Emeritus are elected by the NIFA council members. A list of NIFA council members and their positions can be found at the following link: [NIFA Leadership](#)

The NIFA Council and volunteers consist of the following groups:

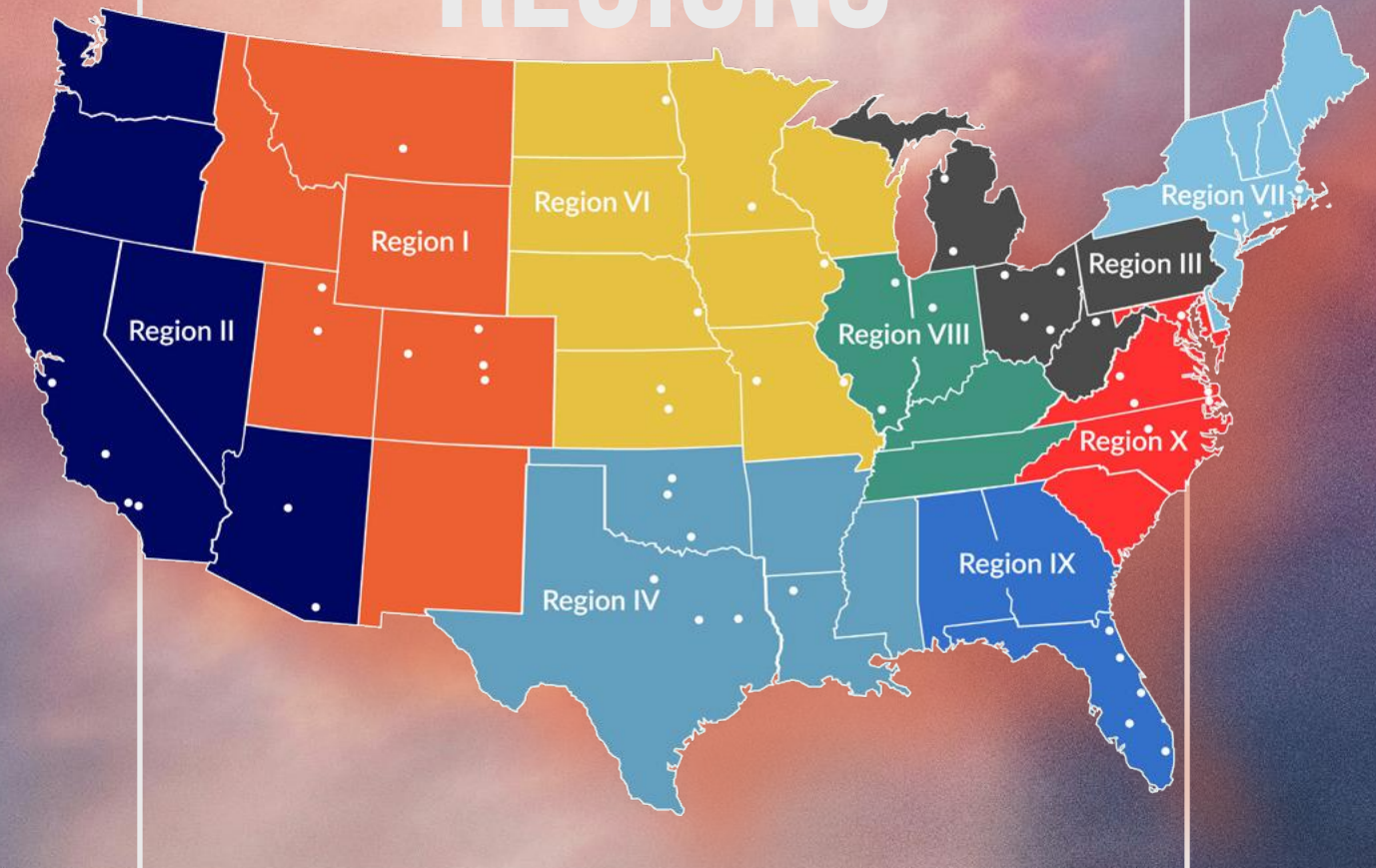
- Executive Leadership
- Regional Representatives
- Members at Large
- Student Representatives
- Managers and Directors
- Council Members Emeritus



All members of the council have had experience with NIFA either as competitors, advisors, coaches, or all three. Each council member wants to help you and your school by continually providing the best experience possible for you and your students. While not every individual on the council has a vote, everyone brings valuable knowledge and expertise to the council.

Remember that your first point of contact will be your Regional Representative. They will be able to guide you deeper as needed. Additional information on the different council members and their responsibilities on the council can be found in the Policy Manual at the following link: [Policy Manual](#)

REGIONS



NIFA is split into nine different regions across the country. Each school's geographical location will determine the region you will compete in. Each region and its member schools are represented on the NIFA Council by a Regional Representative. Each region votes for their Regional Representative who is elected to a 3-year term. Your Regional Representative will be your main point of contact for communication with the Council and any questions you might have.

Your Regional Representative will provide you with contact information for the other advisors in the region.

The NIFA Member Schools page can be found here:

[NIFA Member Schools](#)

SAFECONs

SAFECON is an acronym for **S**afety **A**nd **F**light **E**valuation **C**onference. SAFECON competitions are held at the regional and national level each year. Regional SAFECONs must be held between September 1st and March 15th of each competition year and are generally hosted by one of the schools in the region. The National SAFECON must be held between April 1st and June 1st of each year and can be hosted by a school, organization, or a specific city. Invitations to the National SAFECON are based on qualification requirements at the Regional SAFECONs which are listed in the Red Book. There will be more specific information about competition events in a later section.

The following sections will dive deeper into starting a team and the resources needed to compete at SAFECON events.

WEBSITE

The NIFA website will be your main source of information as you work through starting your team as well as preparing for competitions.

The website can be accessed at: <https://www.nifa.aero>.

Additional links for the various sections of the website will be shared in the following sections.

NIFA REDBOOK

“The National Intercollegiate Flying Association Rules for Intercollegiate SAFECONs”, also known as the NIFA Red Book, is the official rule book that provides all the rules and guidelines for competition at NIFA SAFECON events. This information includes the acceptable means of contestant behavior, the operation of aircraft during SAFECON events, and all the referenced rules in the sections below.

NOTE: The rules and information in this manual are meant to provide the **MINIMUM** acceptable performance and safety standards during SAFECON events.

The NIFA Red Book can be found at:
[NIFA RED BOOK](#)

You can download a PDF copy of the Red Book, or you can purchase a hard copy from the website.

THINGS NEEDED TO START A TEAM

SCHOOL REQUIREMENTS (RED BOOK: I.C.1-4)

- Each team is required to be associated with a regionally accredited institution of higher education.
 - This requirement is the same for a two- or four-year school.
- Each team must be a member in good standing with NIFA.
 - This means the membership dues have been paid for each current competition year.

School memberships can be paid for at this link: [School Membership](#)

Dues can be paid after July 1st each year and must be paid before September 1 each year.

- Only one team may represent any one campus.
- Each team must be accompanied by a faculty or staff advisor.
 - The advisor will be responsible for the team's compliance with the Red Book and all NIFA procedures.
 - The information following in this document will give a good start on things that the advisor will need to be aware of when leading their team.
 - The advisor must be recognized by the school as the official representative for the team.





STUDENT REQUIREMENTS (RED BOOK: I.D.1-9)

- Each team can have as many students as they would like to bring within the limits of what each event will allow.
 - Specific event limits will be touched on later in this document.
- Each student must be currently enrolled at the institution the team represents.
 - There is an exception to this requirement noted in I.D.1.a.
 - The circumstances of any extension should be communicated with the Senior Chief Judge to confirm the student's eligibility.
- Each student must pay membership dues each year.

Student memberships can be paid for at this link:
[Student Membership](#)

Dues can be paid after July 1st each year and must be paid before the Regional SAFECON.

- **IMPORTANT:** Advisors can purchase memberships for students and pass along the membership to their students OR Advisors can have their students purchase their membership themselves.

- Most advisors will purchase the membership for their students and then the students will complete their portion of the registration.
- However you choose to do this, be sure to coordinate with your students about how you would like this to be complete. A student cannot compete at a SAFECON until they have registered.
- Each contestant may compete in no more than four (4) Regional and four (4) National SAFECONs.
- Additional guidance can be found in the remaining portion of the Red Book I.D.3-9.

AIRPLANE ELIGIBILITY (RED BOOK: I.B.1-5)

- Various aircraft limits are in place to make competition as safe and fair as possible. Please reference the Red Book section on Airplane Eligibility for the requirements.
 - Important points on aircraft eligibility include the following:
 - Maximum seating capacity of 4 people.
 - Maximum horsepower is 250 BHP (Brake Horsepower).
 - Aircraft may not be equipped with an after-market STOL modification.

NIFA RESOURCES

NIFA has numerous resources available to view on its website. Each resource provides specific information to help guide you through the NIFA experience. The following are a few of the specific items that you will need to be able to access at any given time.

Main NIFA Resource Page :

[NIFA Resource Hub](#)

- o The main page for all NIFA documents and resources.

NIFA Bylaws : [NIFA Bylaws](#)

- o The rules and regulations that are set to govern NIFA's internal affairs and operations.

NIFA Code of Conduct :

[NIFA Code of Conduct](#)

- o This document spells out expected conduct for Coaches/ Advisors, NIFA Judges/Officials, and Student Competitors.

NIFA Policy Manual :

[NIFA Policy Manual](#)

- o This manual lays out the policies and procedures on how the NIFA Council will conduct its business. The NIFA Bylaws will take precedence over the policy manual if there are any conflicts.

NIFA Red Book : [NIFA Red Book 2025](#)

- o The official rule book of the National Intercollegiate Flying Association.

NIFA Judges Manual: [Judges Manual](#)

- o This manual contains policies and procedures for all judges from the Senior Chief Judge to the Event, Staging, and Scorekeeping judges.

Official results from previous SAFECONs:

[SAFECON Official Results](#)

Link to the National SAFECON

information HUB: [NIFA SAFECON 2025](#)

Previous competition tests and resources:

[Previous Competition Practice Tests](#)

- o **The previous competition tests can be used to start training your team in how to study and prepare for a Regional or National SAFECON event.**
- o Additional event specific information will be discussed below.





COMPETITION EVENT INFORMATION

This section will cover each of the events competed at any given SAFECON event and the general contestant limits for each event. The information in this section is baseline information to get you started with each event. Additional information for each event can be found in Sections III (Flight Event Judging Rules) and IV (Ground Event Judging Rules) of the Red Book.

NOTE: The contestant numbers mentioned below are the standard event limitations as noted in Red Book I.E.3.a-g. Changes to those numbers can be made but will be announced before the competition. It is always a smart idea to have additional individuals ready to compete in the event should additional slots be made available.

NOTE: Not all events will necessarily be contested at Regional SAFECONS. Events normally only held at the National SAFECON can be contested at the Regional SAFECON at the Region's discretion depending on the host school's available resources and judging availability.

NOTE: Scoring will be based on the information found in Red Book I.J.1-7. Region SAFECONS can be scored based on a Top 10 or Top 20 scoring methodology at the voting discretion of the region membership before each competition. National SAFECONS will be scored based on the Top 20 scoring methodology.

FLIGHT EVENT RULES

POWER-OFF LANDINGS (RED BOOK: III.F.1-9)

- o Five (5) contestants maximum from each team.
- o The competitor will be judged based on the number of landings as follows:
 - Best two (2) out of three (3) landings at Regional SAFECONs.
 - Best two (2) of two (2) landings at National SAFECONs.
- o These landings will be completed with power being reduced to idle abeam the target line.

SHORT-FIELD LANDINGS (RED BOOK: III.G.1-9)

- o Five (5) contestants maximum from each team.
- o The competitor will be judged based on the number of landings as follows:
 - Best two (2) out of three (3) landings at Regional SAFECONs.
 - Best two (2) of two (2) landings at National SAFECONs.
- o Unlike with power-off landings, performance will be judged based on an approach without having to reapply power once power is reduced.
 - Power must be reduced slightly abeam the zero line but does not have to come to idle as in the power-off landing event.

NAVIGATION (RED BOOK: III.E.1-14)

- o Maximum of three (3) crews from each team.
 - Can be split up between Traditional and Unlimited categories depending on aircraft eligibility.
 - Traditional category aircraft must have NO functioning area navigation capabilities.
 - o This includes but is not limited to GPS, single (or multiple) point R-NAV units, or any other area navigation equipment.
 - Unlimited category aircraft have no limitations on navigation equipment.
 - The Traditional and Unlimited categories will be scored and ranked independently of each other.
 - Each crew will consist of a PIC and a Safety Observer.
 - The Safety Observer is responsible for aiding in separation from traffic and obstructions during the flight.
- o The event will consist of a cross-country flight over a multiple leg course between 70 Nautical Miles and 120 Nautical Miles in length measured from the first checkpoint to the last checkpoint.
- o Traditional category aircraft must meet the requirements of Red Book I.B.5.
- o **NOTE: Because of time constraints, each team generally must have two (2) aircraft to be able to fly in all three heats.**

MESSAGE DROP (RED BOOK III.D.1-6)

- o Five (5) crews maximum from each team.
- o The event consists of two targets generally located along the runway. One target is placed at the approach end of the runway and the other is placed near the departure end of the runway.
 - The targets can be bright barrels or easily visible symbols on the ground.
- o Each plane will fly over the runway at normal cruise speed no lower than 200 ft. AGL with flaps retracted.
 - Slow flight is prohibited.
- o Two containers meeting the requirements found in the Red Book will be dropped on each run. One container at the approach end target and one container at the departure end target.

CREW RESOURCE MANAGEMENT/LINE ORIENTED FLIGHT TRAINING (CRM/LOFT) (RED BOOK: III.A.1-11)

- o One (1) crew of two (2) pilots from each team.
 - Usually only contested at the National SAFECON
 - Regions can choose to hold this event if resources allow.
- o Each crew will fly a scripted LOFT scenario during the SAFECON.
- o Each LOFT will be scripted from the crew's first contact with the other crew members to the final landing or resolution point.

- o The LOFT scenarios will be planned with an even and realistic mix of simple problems (e.g. one navigation radio failing) and complex situations (e.g. one of three landing gear not extending).
 - **NOTE: Specific simulator or aircraft knowledge will not be tested.**
- o The route of flight and other pertinent information will be given to the contestants prior to the actual flight.
- o Each team will be allowed practice time in the simulator to become familiar with the simulator being used.

IFR SIMULATED FLIGHT (RED BOOK: III.C.10)

- o One (1) contestant maximum from each team
 - Usually only contested at the National SAFECON
 - Regions can choose to hold this event if resources allow.
- o The purpose of this event is to test contestants in a simulated, dynamic IFR environment while performing to the standard procedures required by the Aeronautical Information Manual (AIM) and Air Traffic Control (ATC).
- o Each flight may include any or all the following: departure climbs, descents, and turns; VOR and NDB tracking; radar vectors; a non-precision approach; a precision approach; a missed approach; a landing; and all communications required to conduct IFR flight.
 - **NOTE: Each contestant MUST be proficient in IFR procedures.**
- o Each team will be allowed practice time in the simulator to become familiar with the simulator being used.

GROUND EVENT RULES

COMPUTER ACCURACY TEST (RED BOOK: IV.C.1-5)

- o Five (5) contestants maximum from each team.
- o The time allotted for the test will be noted on the answer sheet.
 - **NOTE: Most tests will be 60-70 minutes.**
- o Each contestant will solve problems involving the use of a manually operated flight computer or E6B. The exam includes problems on time, speed, distance, wind corrections, fuel requirements, and conversion factors.
- o The exam will consist of multiple choice, true-false, or fill in the blank type problems.
- o A list of approved manual flight computers can be found in the NIFA Judges Manual on the NIFA website.
 - Only unaltered, approved, and manually operated flight computers will be used.
 - Contestants may bring more than one E6B into the test as long as all devices are approved.
- o **NOTE: Contestants should bring multiple pencils and pens as backups.**
- o **NOTE: Individual timers may be used but may not emit audible alarms.**

SIMULATED COMPREHENSIVE AIRCRAFT NAVIGATION (SCAN) TEST (RED BOOK: IV.E.1-4)

- o Five (5) contestants maximum from each team.
- o The time allotted for the test will be noted on the answer sheet.
 - **NOTE: Most tests will be 60-70 minutes.**
- o The SCAN test is an exam with problems that reference a simulated cross-county flight over a given route. The flight planning includes questions on weight and balance, aircraft performance, FARs, aeronautical charts, weather interpretations, and fuel consumption.
- o Competitors may use non-programmable flight computers, plotters, pens, pencils, or a basic four function, non-programmable calculator.
 - **NOTE: CX-3 digital flight computers may be allowed but the device must have its memory erased in front of a judge.**
 - **NOTE: Devices capable of storing and retrieving user input or commercially prepared text will not be allowed.**
- o **NOTE: Contestants should bring multiple pencils and pens as backups.**
- o **NOTE: Individual timers may be used but may not emit audible alarms.**



AIRCRAFT RECOGNITION TEST (RED BOOK: IV.B.1-4)

- o Five (5) contestants maximum from each team.
- o This test consists of no fewer than thirty (30) images of aircraft where the contestants will need to identify the make, model, and common name for each aircraft.
 - 50 – Multiple Choice questions
 - 10 – Fill In the Blank questions
- o There is a mix of multiple choice and fill in the blank sections on the test.
- o Each competitor will be shown a picture of an aircraft for three (3) seconds. They will then have fifteen (15) seconds to answer the multiple-choice questions OR thirty (30) seconds to answer the fill in the blank questions.
- o Pictures can be from any angle.
- o "Janes, All the World's Aircraft" will

be used as the final authority for identifying aircraft.

- o **NOTE: Contestants should bring multiple pencils and pens as backups.**
- o **NOTE: Individual timers may be used but may not emit audible alarms.**

GROUND TRAINER (RED BOOK: IV.D.1-4)

- o Two (2) contestants maximum from each team.
- o **NOTE: Three (3) contestants can be allowed at the National SAFECON. Any change from two (2) contestants will be communicated before the start of the competition.**
- o This event is designed to test the contestant's ability to fly a specified pattern in a flight training device under instrument conditions.



- Patterns will have specific headings, air speeds, altitudes, rates of turn, and times to maintain on specific legs throughout the pattern.
- The pattern will be distributed to all the teams at the General Contestant Briefing.
- Contestants may, at their own discretion, add individual markings or notations to the copy of the pattern that they are provided by the judge.
- **IMPORTANT:** Only the following items, as spelled out in the Red Book, may be used during the event:
 - A copy of the pattern provided by the judge is the only document allowed in the flight training device. Per the bullet point above, contestant added markings are allowed.
 - A timing device that is not programmable, does not emit any audible or tactile signals, does not

have internet connectivity.

- No other devices may be used by the contestant during the event.
- Each team will be allowed practice time in the simulator to become familiar with the simulator being used.

AIRCRAFT PREFLIGHT INSPECTION (RED BOOK: IV.A.1-9)

- Two (2) contestants maximum from each team.
- For this event, a light, single engine general aviation aircraft will be “bugged” with at least thirty (30) discrepancies.
 - **NOTE: A discrepancy is defined as a condition of the airplane that makes it unairworthy, unsafe, or illegal for the intended flight.**



- o Contestants will be given no more than fifteen (15) minutes to complete the inspection.
- o The inspection should be completed in the manner/flow indicated in the aircraft's Pilot Operating Handbook.
 - Contestants will be graded based on proper flow and safety.
- o Prior to entering the preflight area, each contestant will be briefed on the event scenario by the preflight judge.
 - The scenario will be the same for each team.
 - Contestants from the same team must immediately follow each other.
- o Each contestant will earn one point for each valid discrepancy found on the aircraft. If the discrepancy called is deemed invalid (i.e. saying there is a wheel missing when all wheels are present and installed), then a point will be deducted.
 - The contestant with the highest

number of discrepancies will be the winner.

- In the event of a tie, the competitor with a faster time of completion will be the winner.

AVIATION MAINTENANCE TECHNICIAN TEST

- o **NOTE: This event is still in the testing phase but is being contested at both the Regional and National SAFECONs.**
- o **NOTE: This event does not count towards overall SAFECON Championship points.**
- o This test is a multiple-choice test utilizing the Aviation Maintenance Technician ACS written test materials.
- o The parameters surrounding this event will change with time as NIFA looks to create a practical, hands-on event.

PUTTING TOGETHER/ STARTING A TEAM

VISIT AND OBSERVE A COMPETITION

The most ideal way to start a team is to bring a core group of students who show initial interest to a Regional or National SAFECON to observe. A lot of what happens at competition is hard to grasp without seeing it in person. Region Representatives should help facilitate this if they are available.

Advisors should try to spend time with the Region Representative, if they are available during the competition, to ask questions, help to solidify basic processes and procedures regarding starting a team and getting to competition.

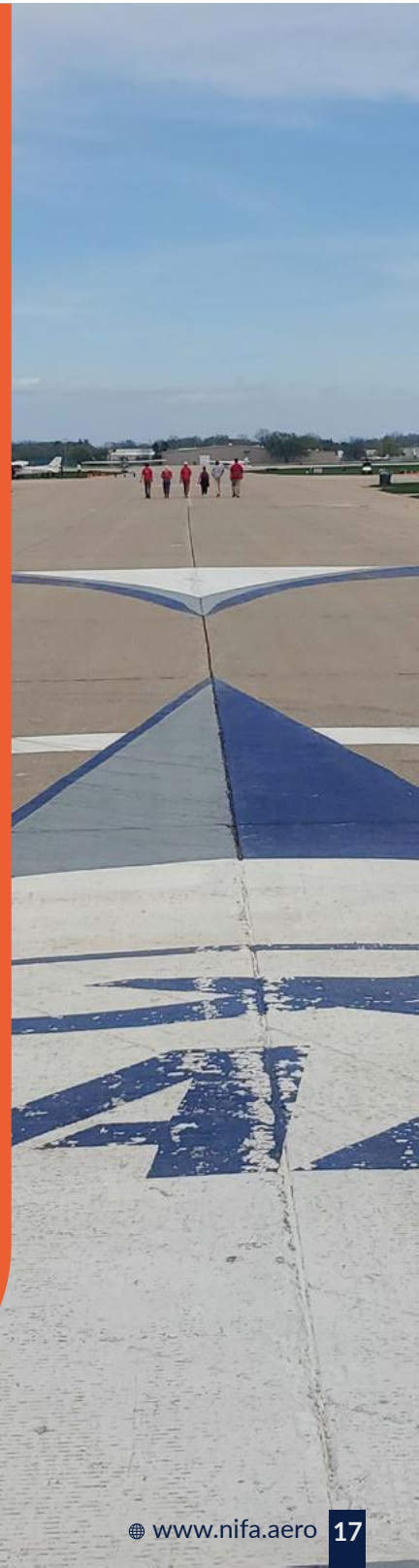
Dates for the various Region SAFECONs and the National SAFECON can be found on NIFA's website.

RECRUITMENT

Recruitment will look different for each team but simple steps such as announcements, fliers, organization fairs, and anywhere you can pull the students in are a good start. Some teams may hold mini competitions with prizes to excite and interest students and to also get an idea of who might do well at certain events.

BUDGET

Each team's budget will vary depending on what the school's administration will allow for each competition cycle. While not specific numbers, any given year you can estimate you will spend \$10,000-\$15,000 for a Regional SAFECON and \$15,000-\$30,000 for a National SAFECON. These numbers will be fluid and can be more or less than the numbers above depending on your school's budget allowances.



Potential items to think about when building a budget out each year:

- School NIFA membership fee
- Student NIFA membership fee
 - This can be fluid during the year if you add students ahead of competitions.
 - Student competitor numbers can be fluid between both Regional and National SAFECON events. There are no limits to the number of competitors you bring other than event specific limitations.
 - If you bring someone to Nationals you must make sure they are registered and in the system before the competition. This will require you to pay the student membership fee for that student ahead of the competition.
- Cost of aircraft
 - You will need to think about and decide how much practice you are going to allow each competitor and a general idea of transit costs to and from the competition sites.
 - Depending on how the school handles aircraft cost, this could include fuel and maintenance expenses or those could be handled as their own line item.
- Lodging during competition
 - Hotels or Air BnB style rentals are a few different options.
- Rental vehicles while at competition.
 - The use of school vehicles can sometimes help reduce or eliminate rental vehicle costs.
- Cost of food while at competition.

GENERATING FUNDS

To help cover the costs of a flight team, most schools will have a mix of school subsidization, fund raising events, or sponsorships. Some teams even treat their flight team like a club or school organization and require their team members to pay annual or semesterly dues. Some teams also require that the students also pay a team fee to participate. That could look like a specific fee for flight events to practice and compete in the landings and/or navigation events or even just a general team member fee for those who are only competing in the ground events.

Some examples of potential fundraising your team could do are:

- Student team memberships.
- Sponsorships (Local or National)
- Concessions sales at various school sports or fine arts events.
- Fly-In events
 - Charge for ramp display access.
- Banquets
- Dances
- Selling parking spaces at school sports events.
- Washing school aircraft.

BUILDING, PRACTICING, AND CHOOSING YOUR COMPETITION TEAM

BUILDING YOUR TEAM

Part of recruiting your team also involves how you are going to build your team. Some teams with smaller numbers will utilize their competitors in many, if not all, of the events available. Some teams will specialize and some competitors will only compete in a few events. Others will find a middle ground where members will specialize in one of the three main ground tests (SCAN, Aircraft Rec, or Computer Accuracy) and then compete in as many of the flight events as possible. The trick is to maximize knowledge and efficiency across all the events as much as possible to be as successful as possible across all the events. That success isn't always possible if one competitor is trying to do everything.

Note: For a student to be able to qualify for the Top Pilot award the competitor must compete in the events mentioned in Red Book I.J.4.

PRACTICING

GROUND EVENTS

There are many ways to practice and eventually you will find what works best for your team. Here are a few things to think about when working on ground event practice:

- Decide on how you will break up each individual event.
 - You may want to have instructors or a senior level student/competitor act as a coach for each individual event.
- Decide how much study time you want your team to complete each week.
 - You will also need to figure out how you want to track the practice and study times.
- Use the practice test bank at [NIFA Practice Test](#) to start working on how to complete the test events.
 - The best way to use the practice tests is to reverse engineer the answers to figure out how they originally got the answer.
 - These tests are historical tests used at previous Regional and National SAFECONs and they can be a valuable training tool.
- Ground Trainer patterns are available in the practice test bank and can be flown in a simulator for practice.
 - If you have a FRASCA RTD or RedBird simulator, there are programs available to build and score the patterns.
 - That information can be found at: [FRASCA and RedBird Scoring](#)
- Preflight event can be practiced on any aircraft your school has.
 - **NOTE:** If you are using an airworthy fleet aircraft, ensure that you communicate with your maintenance team on what can and cannot be done to the aircraft and what must be documented.

FLIGHT EVENTS

The best way to practice the flying events is to fly the aircraft. It is simple to say that but the teams who do well practice often have defined goals and are often evaluated in real time with usable feedback to learn from. Like any flight lesson, the competitors will only be as good as the practice and feedback they get.

Here are a few things to think about when working on flight event practices:

Landings

- Start by reviewing the penalties section of the Red Book, (**Red Book: V “Event Scoring Tables”**) and the NIFA Landing Events Safety Review PowerPoint located on the Judging Resources page: [Landing Safety and Penalty Review](#).
 - This PowerPoint will give you details on what the judges are looking for in a pattern and how penalties are being assessed.
- Have your students practice both the Power-Off and Short-Field landings.
- Use defined markings already available on the runways you are using.
- Practice the landings with the actual landing box marked out on the runway.
 - You can use flour, chalk, or if your airport allows, you can also paint the box on the runway.
 - Box dimensions can be found at: [Landing Box Diagram](#)
 - **NOTE: Be sure to obtain permission from the airport authority at the airport you are hoping to fly at if you want to mark the runway in any manner mentioned above OR have your team on the side of the runway as mentioned below. Maintaining good relations with the local airport authorities and tenants is crucial.**
- Spend time with the team on the side of the runway evaluating the landers' performance and debriefing the results.
 - **NOTE: Safety is paramount when you have people on the side of the runway. Be sure to have clear safety protocols and consider having a dedicated Safety Officer who can keep an eye**

out for irregularities while you focus on the landings. Consider allowing the Safety Officer to have a say in whether operations continue or not for given situations.

Navigation

- For the navigation events, you will first need to decide if you will compete in the Unlimited or Traditional category OR a combination of the two.
 - If you intend to compete in the Traditional category, make sure the plane meets the criteria in **Red Book I.B.5.**
- You will then need to design routes with multiple legs for your practice.
- The competitors must plan the flight using a set True Airspeed.
- The following will be graded during the flight:
 - Accurate time to each checkpoint ending at the final checkpoint.
 - Turning within generally .25 Nautical Miles of the checkpoint when at competition.
 - Accuracy of the fuel burn estimated for the entire flight.
- Planning forms and additional resources can be found at: [Navigation Event Information](#)
- NIFA uses two (2) independent Bad Elf GPS Pro units during competition to pull route, speed, and altitude data.
 - While these units are no longer available using a similar GPS unit to or your plane's built in GPS data can be helpful when practicing the navigation flights.
- The following is a navigation route that was flown by a team at a Regional SAFECON competition.

Route & Track Map



Message Drop

- Develop your containers to meet the requirements of Red Book III.D.
 - You can have up to five (5) crews.
 - Each crew will need two containers each.
- Identify who will be the PIC and who will be the Dropmaster.
 - An individual may compete in Message Drop no more than two (2) times and may only compete as a Dropmaster one (1) time.
- Practices can be like competition where your team will aim for two (2) targets, one at the arrival end of the runway and one at the departure end, or you can practice with one target at a time.
- Be sure the flight stays above 200 feet AGL and normal cruise speed which are the requirements for competition.
- **NOTE:** Care must be taken to keep the message drop containers from hitting aircraft, vehicles or buildings.





CRM/LOFT

- Identify your two-person crew and designate one as the Pilot Flying (PF) and one as the Pilot Monitoring (PM).
- This event is very similar to airline LOFT work so if you have individuals on staff who have worked for the airlines or a crew environment ask them to help build the CRM/LOFT scenarios and train the crews.
- IFR Simulated Flight
 - Build multiple trips for your competitors to fly.
 - This should include departures, navaid tracking, arrivals, holds, approaches, procedure turns, etc.

Choosing Your Competition Team

Choosing your competition team comes down to the method you think will best position your team for success. The following are just a few methods that can be used to help identify and select your team for competition:

- Semester long evaluations
 - In this scenario, the top scoring

individuals by average across the semester for each event could earn a spot on the team.

- Competition tryouts
 - Students would practice for the semester and then take a final “tryout” test to position them on the competition team.
- A mixture of the two
 - A weighted mix where a final tryout holds a percentage higher weight than evaluations during the semester and team members are chosen based on the highest average.
- You can always bring additional students as alternates.
 - You will be limited to the maximum number of contestants for each event but bringing alternates can help if a student is not able to compete for any reason.
 - Bringing alternates can also give future competitors a deeper understanding about competition in preparation for future SAFECON events that they might be able to participate in.

WHAT TO EXPECT AT YOUR FIRST COMPETITION

Competitions are a whirlwind of moving pieces. It is very rare for something to not be happening at any given time. A key to having a successful first competition is to lean on the Region Representative, the Chief Judge, and the Host when you have questions or aren't sure of what is happening. Each of those individuals will be a valuable resource to help make sure you are getting through competition.





Here are a few things you can expect from the Region Representative, Chief Judge, or Host in the lead-up to competition:

- **Early July**

- The Region Representative should be reaching out to all the advisors with information on the next competition year and reminders of when the Region SAFECON will be held.

- **Approximately one (1) month before the competition**

- You may be asked to register your team with the host school.
 - As part of the registration process you may be asked to provide the aircraft type, True Airspeed, and if you plan to compete in the Traditional or Unlimited category in the Navigation event.

- **Approximately two (2) weeks to one (1) month before competition**

- An Arrival Briefing should be sent out to the schools and should include some if not all the following information:
- Contact information for the Chief Judge, Host, and Region Representative.
- Registration information for the competition as needed.

- Some hosts at the Regional SAFECONs will require entry fees that are separate from NIFA membership fees to help cover the costs of the event.
 - Any safety specific items that need to be passed along to teams for arrival.
 - Arrival procedures.
 - Fueling procedures.
 - ATC and traffic pattern information.
 - Parking locations.
 - Hot Box/Cold Box locations.
 - This should include a flow to and from the runway(s).
 - Confirmation of events to be contested.
 - Simulator type to be used for the Ground Trainer and/or IFR and CRM events.
 - Aircraft type to be used for preflight.
 - Any other information the Chief Judge and Regional Representative want to get out to the teams.
- **One (1) to three (3) days before the start of competition**
 - Teams will start to arrive to practice before the event.
 - Teams will check-in with the host to verify any additional information and get a preliminary safety brief from the host school representative.

- Official practice times will be held usually one (1) to two (2) days ahead of the start of the competition.
 - If necessary, practice heats will be developed to make sure all teams have an equal chance to practice on site.
- **First day of competition**
 - Each team will be required to attend the General Contestant Briefing (GCB).
 - The GCB is presented by the Chief Judge and lays out the initial plan for the competition along with safety and contingency protocols.

From the end of the GCB to the Banquet at the end of the competition, things can be very dynamic so all teams need to be flexible and ready to compete in any event at any time.

Weather plays a huge role in the schedule. To keep things moving and to have the best chance at finishing all the events, sometimes flying events are moved around to give the best chance to finish within certain weather windows. Regions generally communicate

via text directly between the Chief Judge and the teams or any format generally accepted by the teams. Be sure to have a way to be contacted at any time for updates or changes to the schedule.

The bottom line is to be ready for anything!

One of the final items on the schedule is the Region Business Meeting. This is a chance for the teams to communicate things to the Region Representative and for the regions to work on business for the future as well. The following are a few items that might be discussed at the business meeting:

- Debrief of the competition with good things and things that could be improved.
 - The Chief Judge can be asked to attend the debrief.
- Selection of the next year's Region SAFECON host location.
- Votes on the Region Representative
 - The Region Representative has a three (3) year term.
- Any other business brought to the meeting by one of the member schools.



The final event at every competition is the Awards Banquet. The dress code is usually business attire with most individuals wearing a suit and tie, dress, pant suit, etc. The bottom line though is that the team is comfortable and has a good time. The awards banquet is the chance for everyone to come together to celebrate the accomplishments of the week. IF you have any students who have allergies to any kind of food, please be sure to communicate that with the host during the registration process if you aren't asked directly.

Post competition, it is always good to have a comprehensive team debrief. Competition is fun, fast, and even stressful but a good debrief will help everyone to work through both the good and bad that happened at the competition and give everyone a chance to work towards being better as a team.

There is a lot that goes into starting a team. Please never hesitate to ask questions of your Region Representative or members of the NIFA Council. We want you and your team to succeed. NIFA is better as an organization when we work together even when competing!

Good luck and all the best as you move towards competition!

The NIFA Region Representative Committee and the NIFA Council



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<https://www.nifa.aero>

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NIFA Member School
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