



CIVIL AIR PATROL
U.S. AIR FORCE AUXILIARY

RECREATIONAL PILOT GUIDE

**Step by step guidance
to earning your
sUAS Pilot Wings**

SINGLE TASK EVALUATION

TASK TITLE sUAS Recreational Pilot Checklist (step by step)		TASK NUMBER N/A	
ITEM	PERFORMANCE STEP DESCRIPTION	SCORE (Check One Only)	
		PASS	Fail
1	Take TRUST test and upload copy to OPSQUALS	<input type="checkbox"/> P	<input type="checkbox"/> F
2	Statement of Understanding: Pilot Prerequisites	<input type="checkbox"/> P	<input type="checkbox"/> F
3	Read and understand CAPR 70-1 and CAPR 70-4	<input type="checkbox"/> P	<input type="checkbox"/> F
4A	Complete the CAPR 70-1 CAP Flight Exam 2023	<input type="checkbox"/> P	<input type="checkbox"/> F
4B	Complete the CAPR 70-1 CAP sUAS Flight Exam	<input type="checkbox"/> P	<input type="checkbox"/> F
5	Prepare for your 5u (Ground School)	<input type="checkbox"/> P	<input type="checkbox"/> F
6	Accumulate 1 hour of LOGGED flight time	<input type="checkbox"/> P	<input type="checkbox"/> F
7	Complete Aircrew Professionalism in AXIS ABSORB	<input type="checkbox"/> P	<input type="checkbox"/> F
8	Arrange for a 5u flight with an sUAS Check Pilot	<input type="checkbox"/> P	<input type="checkbox"/> F
9	WMIRS: Create a 5U sortie in your Wing Training mission	<input type="checkbox"/> P	<input type="checkbox"/> F
10	Complete ORM Matrix sheet and upload it to your Sortie	<input type="checkbox"/> P	<input type="checkbox"/> F
11	Complete 5u Questionnaire	<input type="checkbox"/> P	<input type="checkbox"/> F
12	Take your 5u Evaluation	<input type="checkbox"/> P	<input type="checkbox"/> F
13	Debrief and close your Sortie	<input type="checkbox"/> P	<input type="checkbox"/> F
14	Upload your 5u and 5Qu, and check the appropriate boxes	<input type="checkbox"/> P	<input type="checkbox"/> F
15	Follow up with Check Pilot or DOU to approve your endorse	<input type="checkbox"/> P	<input type="checkbox"/> F
STUDENT'S NAME & CAPID		TASK STATUS <input type="checkbox"/> PASS	
EVALUATOR'S NAME & CAPID		TITLE	
EVALUATOR'S SIGNATURE		DATE	

STEP 1

The Trust Certificate

What is TRUST?

The law requires that all recreational flyers pass an aeronautical knowledge and safety test and provide proof of passage if asked by law enforcement or FAA personnel. The Recreational UAS Safety Test (TRUST) was developed to meet this requirement.

TRUST provides education and testing on important safety and regulatory information. If you fly your drone recreationally under the Exception for Recreational Flyers, you must pass the test before you fly.

To fly your drone as a recreational flyer, it's as easy as 1-2-3-4

1. Download B4UFLY for either Android, or Apple in order to get information about where you are flying
2. Learn the rules for recreational flyers
 - a. Fly only for recreational purposes (personal enjoyment).
 - b. Follow the safety guidelines of an FAA-recognized Community Based Organization (CBO). CAP recognizes the Academy of Model Aeronautics (AMA). For more information on the AMA, visit <https://www.modelaircraft.org/>
 - c. Keep your drone within the visual line of sight or use a visual observer who is co-located (physically next to) and in direct communication with you.
 - d. Give way to and do not interfere with other aircraft.
 - e. Fly at or below 400 feet in Class G (uncontrolled) airspace. Fly at or below FAA-authorized altitudes in controlled airspace (Class B, C, D, and surface Class E designated for an airport) only with prior FAA authorization by using the B4UFLY app.
 - i. Note: Flying drones in restricted airspace is not allowed. Drone pilots should always check for airspace restrictions prior to flight on our B4UFLY app or the UAS Facility Maps webpage found at <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad>.
 - f. You must take The Recreational UAS Safety Test (TRUST) and carry proof of test passage when flying.
 - g. If your drone weighs more than .55 pounds, have a current FAA registration. Mark your drones on the outside with the registration number, and carry proof of registration with you when flying.

- i. Note: Beginning September 16, 2023, if your drone requires an FAA registration number it will be also required to broadcast Remote ID information. For more information on drone registration, visit https://www.faa.gov/uas/getting_started/register_drone.
- h. Do not operate your drone in a manner that endangers the safety of the national airspace system.
- i. Individuals violating any of these rules, and/or operating in a dangerous manner, may be subject to FAA enforcement action.

3. Take TRUST

- a. You may take the free online test at <https://trust.modelaircraft.org>. Allow 45 to 60 minutes to complete the test
- b. All test questions are correctable to 100% prior to issuing your completion certificate.
- c. After completing TRUST, you'll need to download, save or print your completion certificate.
- d. If you lose your certificate, you will need to re-take TRUST.

4. Receive your certificate

- a. After you pass the test, you will receive a certificate from the test administrator you selected.
- b. Test administrators will not keep a record of your certificate. You must present a copy of your certificate if asked by law enforcement officers.

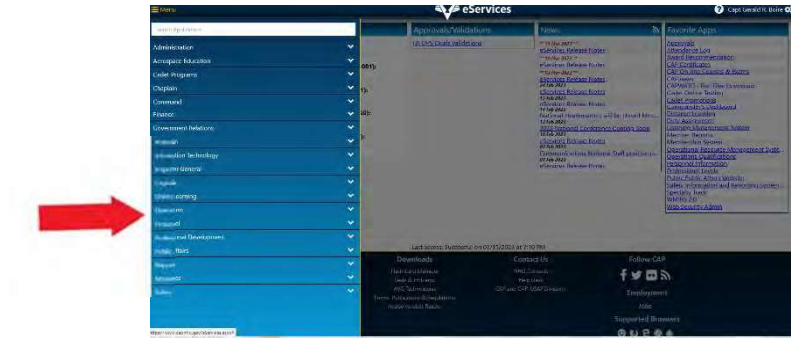
Now that you have it, what do you do with it? You enter the information into e-services. This is a 2 step process: Upload the document to OPSQUALS, and Check Let your DOU know the document is in the system.

1. Upload your TRUST certificate into OPSQUALS

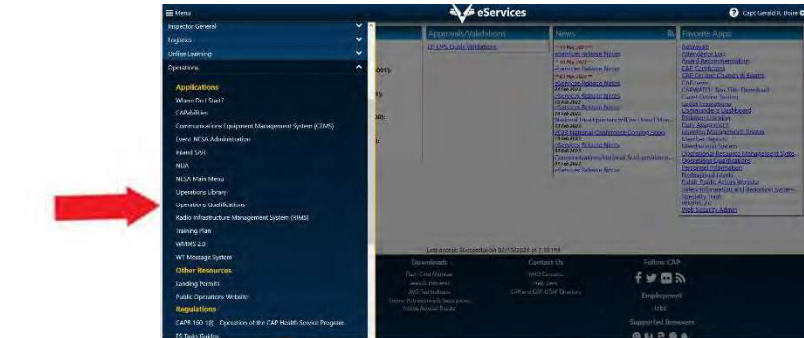
- a. Click/Tap on the Menu Link found on the blue header banner, on the left side of the screen



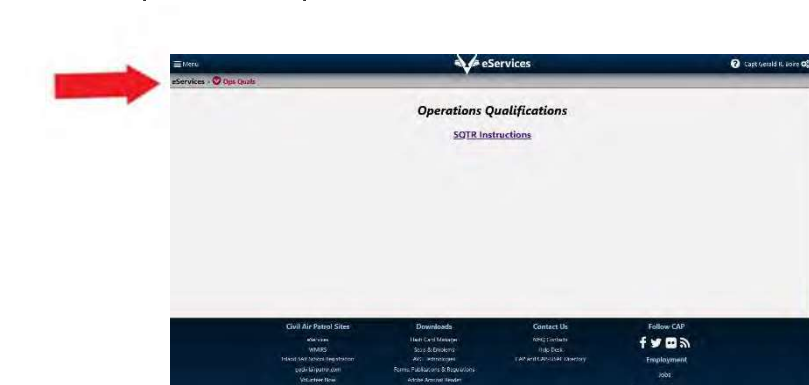
b. Click/Tap Operations



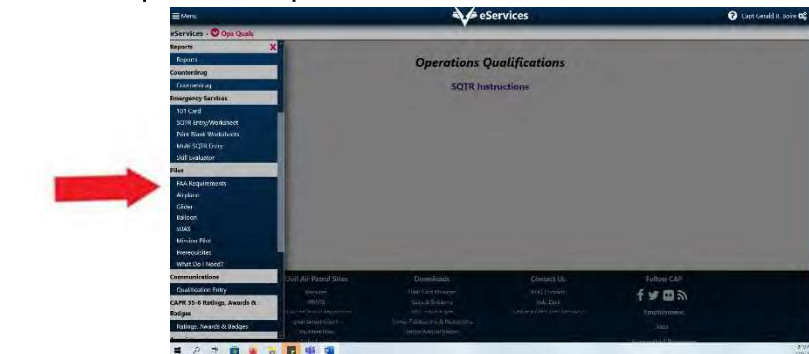
c. Click/Tap Operations Qualifications



d. Click/Tap the red Ops Quals



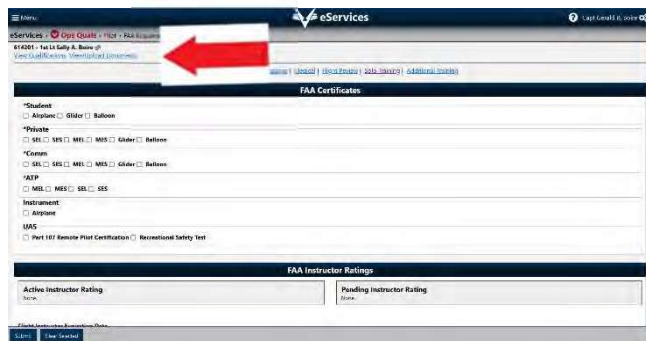
e. Click/Tap FAA Requirements



- f. Enter you CAP ID and click/tap the magnifying glass



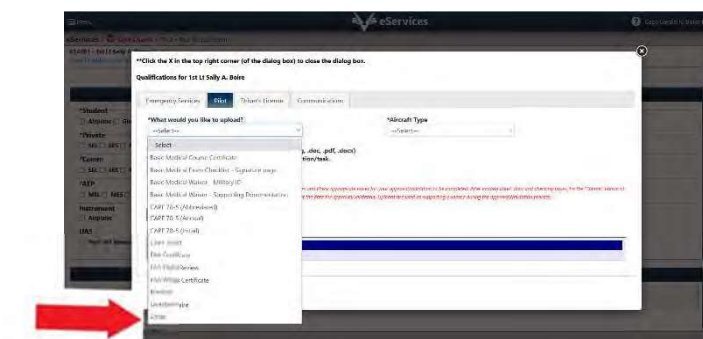
- g. Click the View/Upload Document link



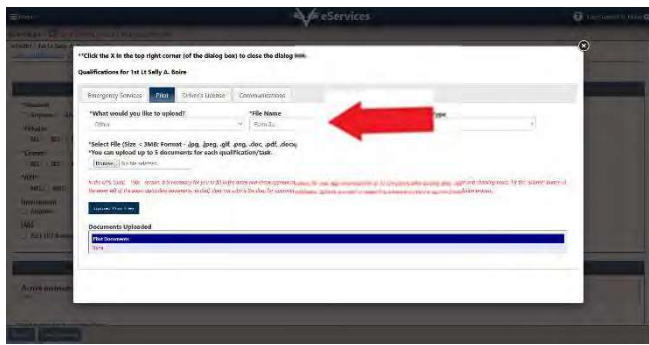
- h. A pop-up will appear. Click/Tab the Pilot tab if it has not already defaulted.



- i. Click/Tab the ***What would you like to upload?** Dropdown menu and Choose "Other"



- j. In the ***File Name** field type "TRUST CERTIFICATE"

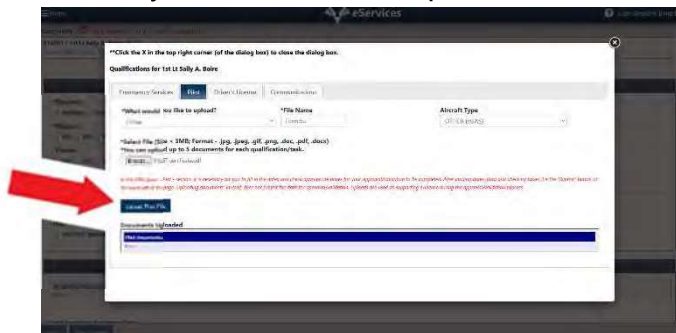


Leave the Aircraft Type alone. It is not required

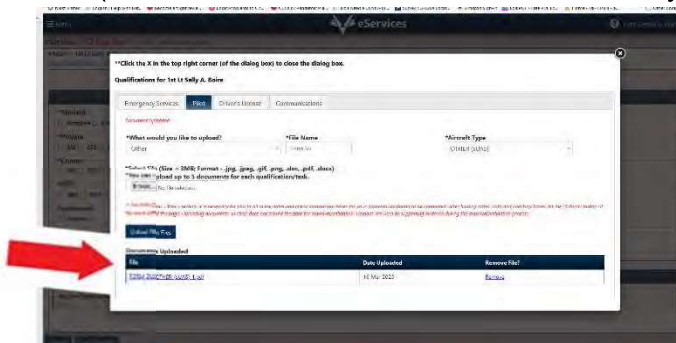
k. Click the "Browse" Button



l. Select the appropriate file. Once you have done that, It will bring you back to the screen and you can click the "Upload Pilot Files" button.

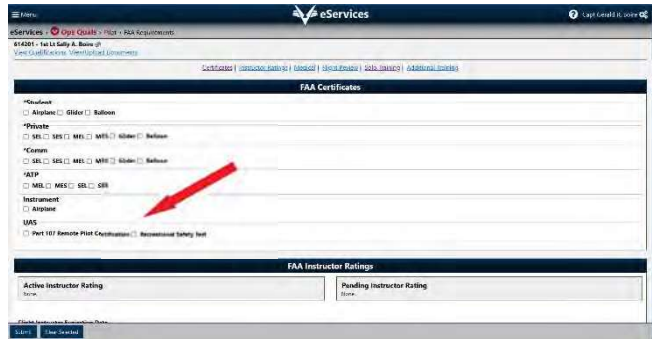


m. If you are successful, the document will appear under the "Documents Uploaded" banner (note that the document will be listed as you named it)

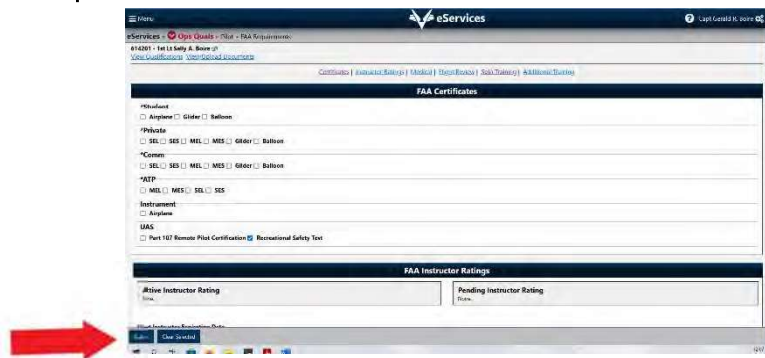


2. Now that you have uploaded your certificate, you need to let the DOU know that the file is in the system. To do that you complete the following:

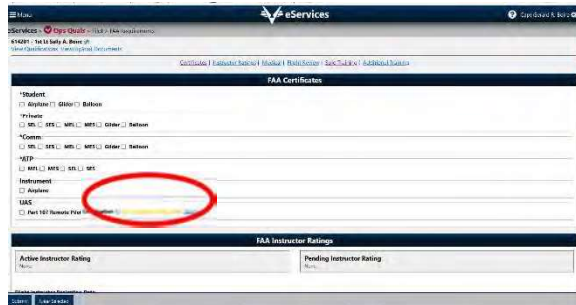
a. In the UAS area click/tap the box beside “Recreational Safety Test”



b. Click/Tap the Submit button



c. The Achievement will turn yellow



That's it. Your Wing/Region DOU will approve it after they confirm the uploaded TRUST certificate. Once approved, the achievement will turn green.

STEP 2

The Statement of Understanding

As with any other achievement in OPSQUALS, there are pre-requisites. The only prerequisite for Recreational Pilots is to date the Statement of Understanding. This process should take no more than 5 minutes to complete. If you are completing this at the same time as entering your TRUST certificate information, you may skip instructions 1-5

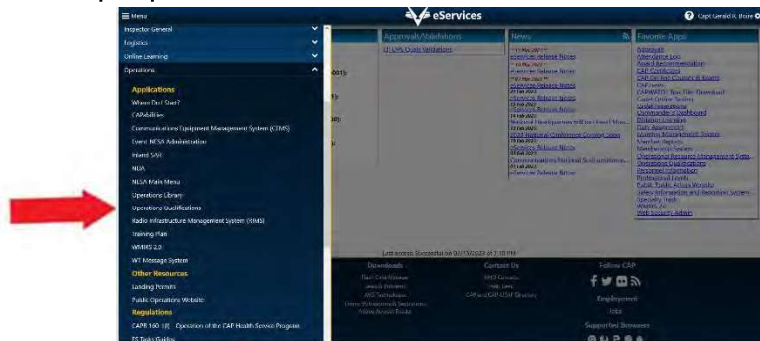
1. Click/Tap on the Menu Link found on the blue header banner, on the left side of the screen.



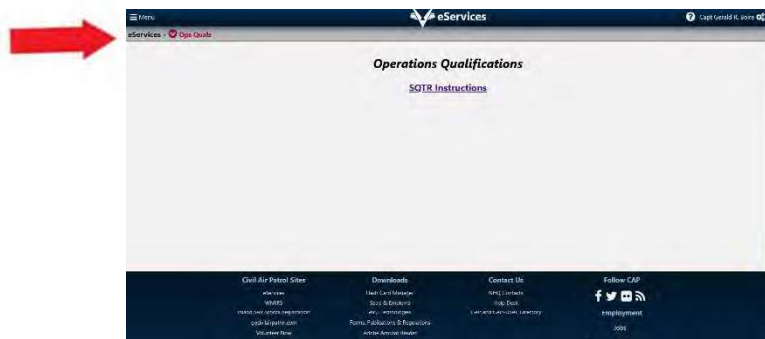
2. Click/Tap Operations



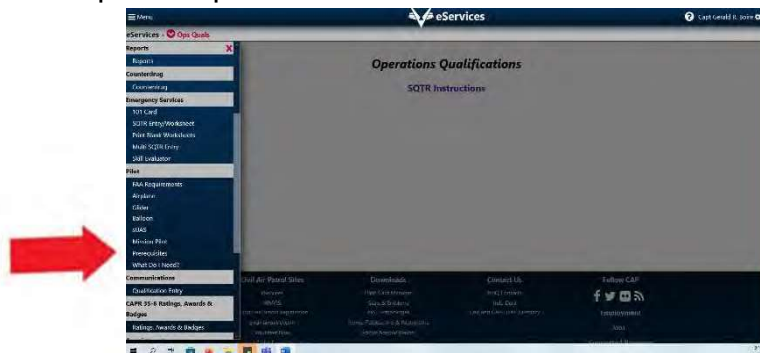
3. Click/Tap Operations Qualifications



4. Click/Tap the red Ops Quals



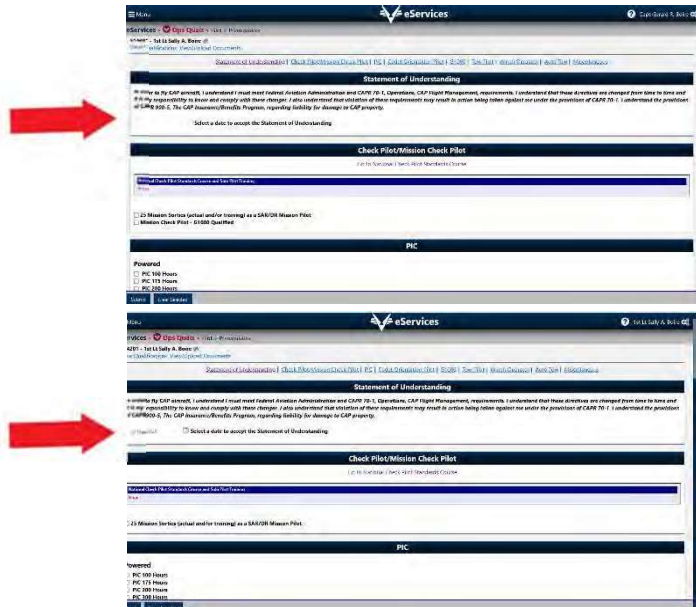
5. Click/Tap Prerequisites



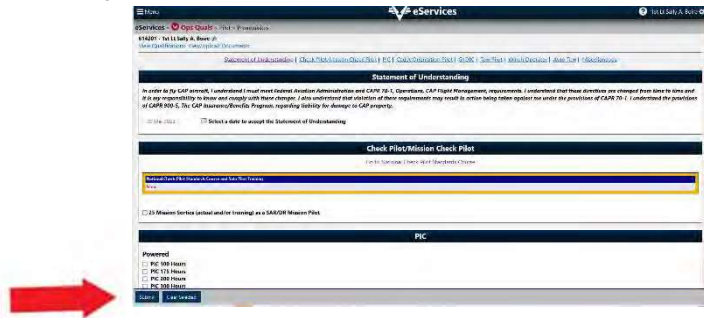
6. Enter you CAPID

7. Read the statement of understanding

8. Enter today's date in the box in the format "dd Mmm YYYY" for example: 09 Mar 2023



9. Click/Tap the submit button at the bottom of the screen



10. If you are successful, the date box area will now show your entry in green



You have signed your statement of Understanding and are ready for the next step.

STEP 3

Know the Regulations and Standards

1. Read CAPR 70-1, CAP Flight Management (ICL 20-08 1 Oct 2020 Incorporated). This will give you an understanding of your responsibilities with respect to the control and management of CAP aircrews, aircraft, and flying programs.

You will find that much of this regulation pertains to Manned flights (ie Airplanes). However, as part of an aircrew AND flying CAP aircraft (yes, and sUAS is an aircraft), it is important that you are proficient in this regulation.

You can find it for download at:

https://www.gocivilairpatrol.com/media/cms/R_701_with_ICL_2008_Incorporated_1AE7DBFB50E71.pdf

2. Read CAPR 70-4, CAP sUAS Flight Management. This regulation states the responsibilities of all Civil Air Patrol (CAP) personnel with respect to the control and management of CAP small unmanned aerial systems (sUAS) aircrews, aircraft, and flying programs.

You can find it for download at:

https://www.gocivilairpatrol.com/media/cms/CAPR_704_09_January_2023_A46_DC0CC5CCAA.pdf

3. Read CAPP 70-4, UAS Interagency Operation. This Pamphlet standardizes the process and procedures for CAP's use of sUASes when working with other organizations.

You can find it for download at:

https://www.gocivilairpatrol.com/media/cms/CAPP_704_UAS_Interagency_Operation_248C0470DDF15.pdf

4. Read CAPS 74-1, sUAS Maintenance Management. This Standard identifies the maintenance requirements for all CAP sUASes.

You can find it for download at:

https://www.gocivilairpatrol.com/media/cms/CAPS_741_sUAS_Maintenance_Mgt_E834BDA643F75.pdf

The above noted documents are also found on the next pages

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STEP 4A

Take the General Flight Exam

With a copy (electronic or hard copy) of CAPR 70-1 you will now enter AXIS and take the CAPR 70-1 General Flight Exam.

It consists of 50 randomly generated questions. There is no time limit. You must receive an 80% score to pass.

This is an annual exam that must be taken every year to maintain currency.

Accessing the test can be a bit of a challenge. If you are not familiar with AXIS, the following will assist you in getting there:

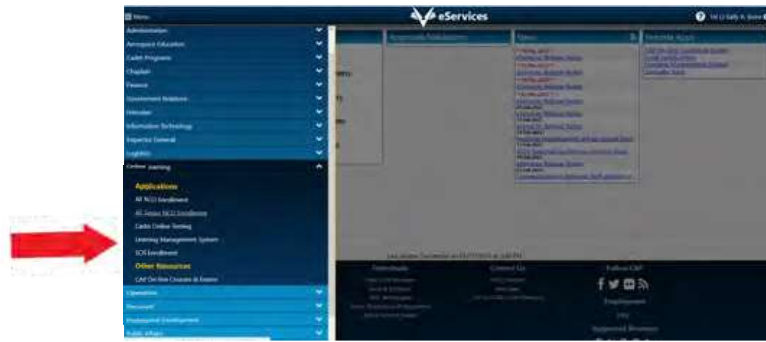
1. Click/Tap on the Menu Link found on the blue header banner, on the left side of the screen.



2. Click/Tap Online Learning



3. Click/Tap Learning Management System.



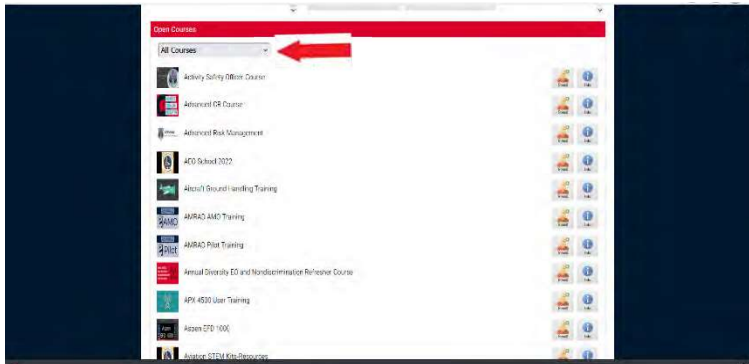
4. Click/Tap the “Go To Axis” Icon.



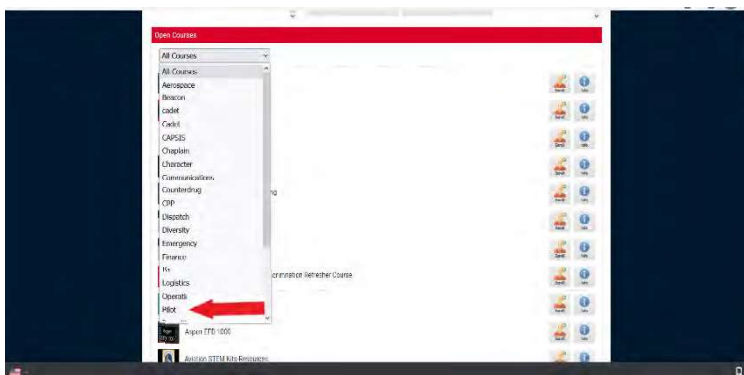
5. You will now be in your Main Portal that will list current courses you have signed up for and have not completed, as well as a listing of all the completed courses you have taken. The Mobile site will have the similar icons, but may look a bit different. Click/Tap the “Course Catalog” tab.



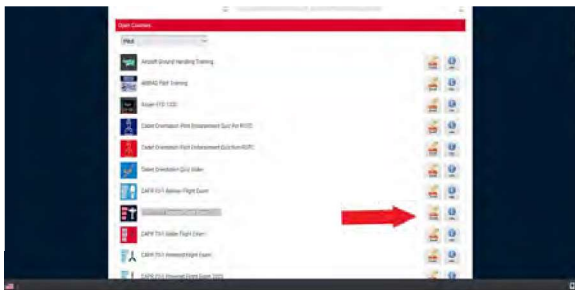
6. This step can be skipped, but it makes it easier to find the Exam: Under the Red “Open Courses Banner”, Click/Tap the chevron where it says “All Courses”



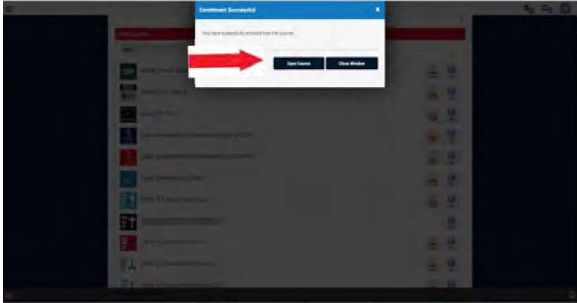
Then choose Pilot



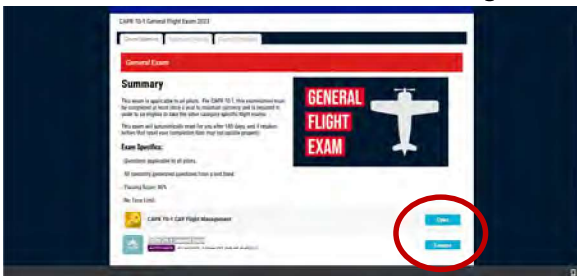
7. Find “CAPR 70-1 General Flight Exam 2023” and Click/Tap on the “Enroll” icon



8. A Popup window will appear advising you that you have successfully enrolled. You are given 2 options. Click/Tap on the “Open Course” button



9. You will note two buttons on the right side of the screen:



- a. One for CAPR 70-1 CAP Flight Management: This will always say “Open”. This is a link to CAPR 70-1, if you need/want an electronic version of it during the exam.
 - b. One for CAPR 70-1 General Exam: This is the Exam. (If you have entered the course before, you will this button will state “Resume”, as in the picture.)
10. Once you enter the Exam, you will be given 50 random questions. This test is not timed, and is open book, so feel free to refer to either a hard copy, or electronic version of CAPR 70-1 for your answers. You must receive an 80% to pass.

Good Luck!!

STEP 4B

Take the sUAS Flight Exam

Now that you have taken the CAPR 70-1 General Flight Exam, you need to take the CAPR 70-1 sUAS Flight Exam.

It consists of 10 randomly generated questions. There is no time limit. You must receive a 80% score to pass.

This is an annual exam that must be taken every year to maintain currency

Accessing the test can also be a bit of a challenge. If you are not familiar with AXIS, the following will assist you in getting there:

1. Click/Tap on the Menu Link found on the blue header banner, on the left side of the screen



2. Click/Tap Online Learning



3. Click/Tap Learning Management System.



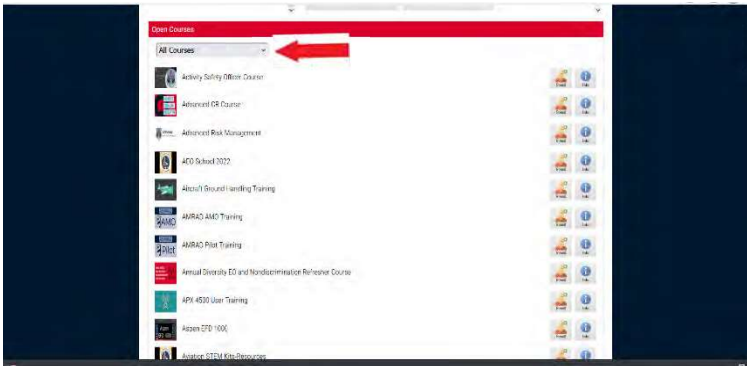
4. Click/Tap the “Go To Axis” Icon.



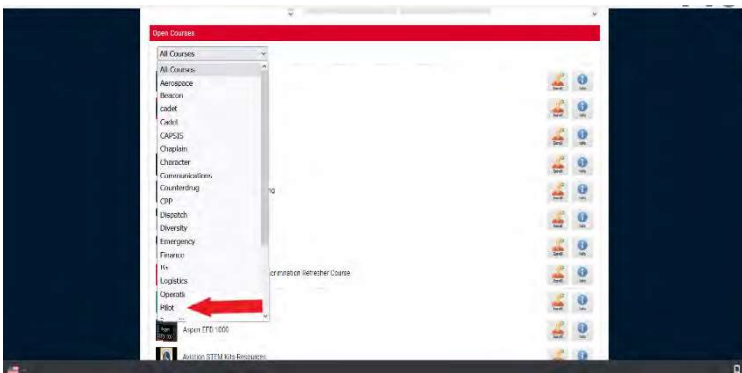
5. You will now be in your Main Portal that will list current courses you have signed up for and have not completed, as well as a listing of all the completed courses you have taken. The Mobile site will have the similar icons, but may look a bit different. Click/Tap the “Course Catalog” tab.



6. This step can be skipped, but it makes it easier to find the Exam: Under the Red “Open Courses Banner” Click/Tap the chevron where it says “All Courses”



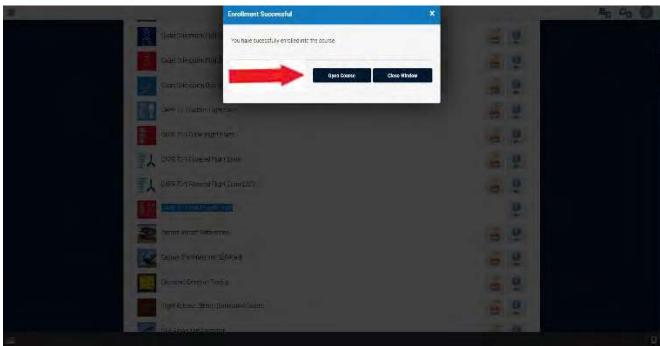
Then choose Pilot



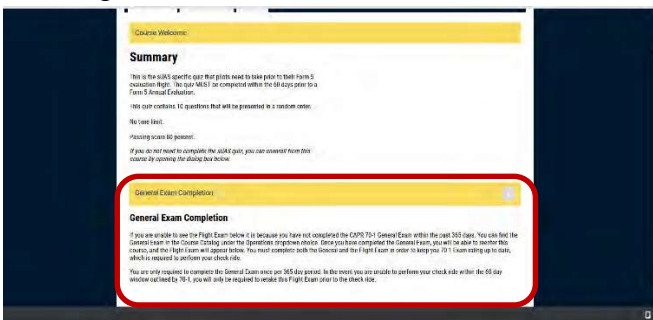
7. Find “CAPR 70-1 sUAS Flight Exam” and Click/Tap on the “Enroll” icon



8. A Popup window will appear advising you that you have successfully enrolled. You are given 2 options. Click/Tap on the “Open Course” button



9. If you have not completed, or passed the General Exam, you will receive the message as shown:



Go back and complete the CAPR 70-1 CAP Flight Management quiz.

10. If you do not receive this notice, you will be asked to start the exam.

Once you enter the Exam, you will be given 10 random questions. This test has elements of the TRUST certificate course, and common sense.

It is not timed. One thing to ALWAYS remember is that YOU, as the Pilot in Charge (PIC) are responsible for every element of the flight.

You must receive an 80% to pass.

Good Luck!!

STEP 5

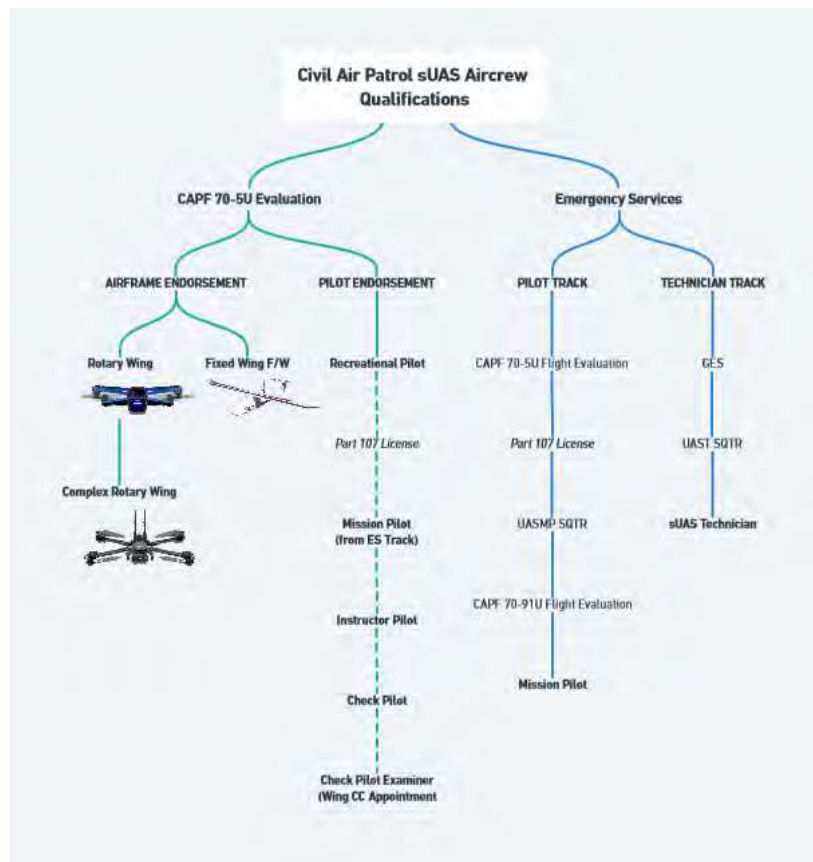
Ground School (Recreation Pilot)

This CAPF 70-5U Ground School mirrors the CAPF 70-5U Evaluation Form, making it easier to orient yourself and move through each section step-by-step until everything is learned.

First of all, lets answer the question “What is the CAPF 70-5U Flight Evaluation?”

The CAPF 70-5U is the annual flight evaluation established by CAP NHQ to qualify members with sUAS Pilot and Airframe endorsements. It is the “test” that all sUAS pilots must take before receiving any Badge or Endorsement.

Below we see the various streams that sUAS pilots can have in Civil Air Patrol.



On the following page you will see what a CAPF 70-5u looks like.

Some of it, we've already covered, so now we'll go over the remaining pieces. We will go over each section step by step to ensure that you are confident in your knowledge.

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CAP sUAS PILOT FLIGHT EVALUATION

ANNUAL ABBREVIATED

DATE OF FLIGHT EVALUATION:

MEMBER'S NAME (print or type)

CAPID

CHARTER NO.

PRIVILEGE(S)
EXERCISED
(Mark all that apply)

sUAS MAKE & MODEL

ADDITIONAL CAP ENDORSEMENTS (Evaluator initials [typed/printed] blanks)

- Recreational
- Complex Rotary Wing sUAS
- Rotary Wing sUAS
- Fixed Wing sUAS

- Instructor Pilot
- Check Pilot

- Part 107
- Recreational

FLIGHT TIME (minimum of 0.3 hours)

OTHER CAP ENDORSEMENTS (list)

- I. ORAL DISCUSSION** **S U V NP**
- A. Annual Online Written Exam.....
 - B. Review CAPR 70-4 & Supplements
 - C. Review Flight Release Procedures
 - D. Review WMIRS/ORM Requirements....
 - E. Review CAPR 76-1 & Supplements.....
 - F. Emergency Procedures
 - G. Electronic Flight Log (if applicable).....

- II. PREFLIGHT PREPARATION**
- A. Certificates & Documents.....
 - B. Obtaining Weather Information
(Part 107 Only)
 - C. Determine Weight & Balance (Part107)
 - E. Demonstrate LAANC filing
 - F. Determine Landing Performance
(Part 107 only)
 - G. Determine Airspace Restrictions.....
 - H. Aircraft Systems.....
 - I. Aeromedical Factors (Part 107 only).....

- III. GROUND OPERATIONS**
- A. Visual Inspection
 - B. Starting Engines
 - C. Sensor Operation (Part 107 only).....
 - D. Use of Checklist (mandatory)
 - E. Crew Briefing.....
 - F. Sterile Area Procedures
 - G. Post-flight Procedures.....

- IV. AIRPORT & TRAFFIC PATTERN OPS**
- A. Radio Comm & Phone Contacts
 - B. Airport Traffic Patterns (Part 107 Only)

- V. TAKEOFF & CLIMBS**
- A. Normal Takeoff & Climb
 - B. Crosswind Takeoff & Climb - FW only
 - C. Team Ground Launch – FW only

- VI. MANEUVERS** **S U V NP**
- A. Straight & Level Flight.....
 - B. Square Pattern.....
 - C. Point of Interest.....
 - D. Approach to Landing
 - E. Recovery from Unusual Flt Attitudes
 - F. Landing and Shut Down.....

- VII. NIGHT FLIGHT OPERATIONS**
(Part 107 only)
- A. Physiological aspects of night flying.....
 - B. Preparation & Personal Equipment.....
 - C. Aircraft & Airport Lighting
 - D. Night Orientation and Navigation

- VIII. EMERGENCY PROCEDURES**
- A. Emergency Approach & Landing
 - B. System & Equipment Malfunction
 - C. Emergency Descent

- IX. SAFETY AWARENESS**
- A. Vigilance, Risk Mgt & Judgment
 - B. Battery Management
 - C. Use of Crew Resource Management.....
 - D. Ground Handling Procedures
 - E. Use of Risk Management (Go-No Go)

- X. INSTRUCTOR & CHECK PILOTS**
(Part 107 only)
- A. Demonstrate ground instruction
 - B. Positive control exchange & who is PIC
 - C. T.O. & Landing from both control positions
 - D. Demonstrate teaching maneuvers in flight
 - E. Demonstrate evaluating maneuvers in flight
 - F. How to conduct a CAPF-5U (Check Pilot)

- XI. RECREATIONAL PILOT SPECIFIC**
- A. Knowledge of FAA Regulations
 - B. Knowledge of CAPR 70-4 restrictions
 - C. Knowledge of AMA MOU

REVIEW OF CERTIFICATES AND DOCUMENTS (VERIFIED BY CHECK PILOT)		
FAA Part 107 Cert No.	FAA Part 107 Expiration Date	
I certify that I have read and understand all applicable FAA, CAP, and state regulations pertaining to flying subject sUAS aircraft. I acknowledge any restrictions or training requirements stated on this CAPF 5. I also understand that maintaining currency, recurring requirements, and compliance with applicable directives is my personal responsibility.		
Date	Member's Name & Grade (print or type)	Member's Signature
I certify that I have administered a CAP flight evaluation as indicated and that the above-named CAP member has demonstrated the proficiency required to fly the indicated aircraft. The member also successfully completed the questionnaire for the make and model of aircraft flown.		
Date	Evaluator's Name & Grade (print or type)	Evaluator's Signature

1. Review Flight Release Requirements

a. What is a flight Release?

Flight Release is the process whereby a designated “Approval Authority” evaluates an sUAS team’s operational plan, gives the final Go-No Go, then signs a document affirming the sortie is approved.

The following information is non-negotiable:

- i. A release is required for all sorties.
- ii. A sortie release counts for all flights withing the sortie.
- iii. If, during the course of a sortie, situations change and risk level increases substantially, an amended flight release is needed and should be requested from the Approval Authority.

b. Who can release flights?

- i. The decision for who can provide release is currently measured against the CAPR 70-4R sUAS Operational Risk Management Matrix, which has three levels of approval:

RISK LEVEL	APPROVAL AUTHORITY REQUIRED
LOW RISK (14-27)	BRIEFING OFFICER APPROVAL
	This may be a member of IMT Staff briefing you on the mission. Separately, it was recently authorized via CAP NHQ interpretation of CAPR 70-4 that qualified Remote Pilots in Command, or directly involved sUAS Aircrew like Mission Commanders, can authorize Low Risk Sorties.
MODERATE RISK (28-37)	GBD/AOBD/OSC APPROVAL
HIGH RISK (38-49)	WING/CC, DO, DOU or IC APPROVAL

Important notes:

- Releases can be done in-person or through the telephone but **cannot be done solely through text or email.**
- Telephone releases may require digital signature of documents, so teams should familiarize themselves with methods for [e-Signature](#).

2. Review WMIRS/ORM Requirements

a. Web Mission Information and Reporting System (WMIRS)

OVERVIEW

Web Mission Information and Reporting System, or WMIRS (pronounced “Whim-Ers”), is the system CAP uses to manage all mission activities for both ground and air assets. It is located inside [eServices](#) and is interacted with through your internet browser.

We will be discussing WMIRS more at length in a later session. Those who are familiar with WMIRS will not require this extra discussion. For now, this is basic information to whet your appetite.

WMIRS REQUIREMENT CHART

AE under FAA Rec. Rules	OPEX/FTX/SAREX	5U/91U Evaluations	For Operational Missions
Not Required, but can still use WMIRS as needed	Required	Required	Required

The Exception — Aerospace Education

Past programmatic updates have made clear that you are not required to have a Mission Number or Sorties in WMIRS for sUAS Training if flying under Recreational Rules as an Aerospace Education Activity.

sUAS sorties can be approved through the same process that other activities get approved, as described in CAPR 160-1 (Safety Regulation). That said, you may still run WMIRS sorties for this use case. WMIRS sorties are approved quicker but require more admin overhead.

b. Operational Risk Management (ORM) Requirements

Risk management must be completed prior to every training and operational sUAS sortie. CAP NHQ has simplified this process for sUAS crews by creating the printable CAPR 70-4R sUAS Operational Risk Management (ORM) Matrix.

Online Risk Management through WMIRS has not been added (yet) to sUAS Ground Sorties, so the CAPR-70-4R ORM matrix must be filled out and uploaded into each sorties' WMIRS files.

The Matrix is structured in 4 elements:

i. MISSION INFORMATION

Mission and Sortie number, RPIC info, AOBD info

ii. HAZARD IDENTIFICATION

Broken down into four (4) sub-categories where hazards may arise from: Team, Machine, Environment, Mission.

iii. RISK SCORES

Depending on Sortie conditions, may be Low, Moderate or High for each identified hazard. There is a point (PTS) score associated with each selection. When added all together the final score assesses the risk level that your sortie falls under in the Overall Risk Assessment.

iv. APPROVAL AUTHORITIES

Aircrew or chain of command staff and their respective level of risk they can approve for each sortie.

Special Note - It was recently authorized via CAP NHQ interpretation of CAPR 70-4 that CAP qualified Remote Pilots in Command, or directly involved sUAS Aircrew like Mission Commanders, can authorize Low Risk Sorties. This is most relevant for training missions. Operational missions staffed with an Incident Management Team should still have sUAS Teams getting signed off by whoever they are reporting to directly, i.e., AOBD, GBD, etc.

No-Go (N/G) Scenarios

Some hazards have N/G listed in the High Risk category. This means that the sortie cannot begin and is a No-Go until additional risk mitigation is performed. Mitigation has a variable amount of difficulty depending on the hazard.

- **Easier to Mitigate** — Under Team→Reflective Vest, if all team members are not outfitted, the sortie is a No-Go. The simple solution is to go get vests.
- **Harder to Mitigate** — Under Environment→K/P index, 7 or more is a No-Go. Standby and monitor the weather using forecast methods. If responding on a mission, your Incident Management Team may authorize you to travel to the destination but standby on flights until forecasts show a lower K/P index.

On the next page you will find a copy of CAPF 70-4R. It is suggested that if you do not want to print one off every time you fly, you can laminate it, or put it in a plastic sleeve. When filling it out use a dry-erase marker. Take a picture of it when completed for either your records, or to be uploaded into WMIRS.



CIVIL AIR PATROL SMALL UNMANNED AERIAL SYSTEMS OPERATIONAL RISK MANAGEMENT MATRIX

MISSION NUMBER		SORTIE		DATE	
sUAS PILOT IN COMMAND		CAPID		INITIALS	
AIR OPERATIONS BRANCH DIR		CAPID		INITIALS	

HAZARD IDENTIFICATION	LOW	PTS	MODERATE	PTS	HIGH	PTS
TEAM						
COA REQUIRED	NONE	0	NIGHT/BVLOS	2	OVER PEOPLE/DROPPING OB.	3
PILOT PIC EXPERIENCE	50 HOURS OR MORE	0	20-50 HOURS	1	20 HOURS OR LESS	2
TEAM SIZE	3 OR MORE MEMBERS	0	2 MEMBERS (UASMP/UAST)	1	1 MEMBER	N/G
TEAM REST	RESTED	1	SOME FATIGUE	2	TIRED	N/G
TEAM EXPERIENCE	75%-100% QUALIFIED	1	50%-74% QUALIFIED	2	UNDER 50% QUALIFIED	3
PIC FLIGHT CURRENCY	>1 HOUR IN LAST QTR	0	0.1 TO 1.0	2	<0.1 HOUR IN LAST QTR.	3
REFLECTIVE VEST	ALL OUTFITTED	0			ALL NOT OUTFITTED	N/G
MACHINE						
sUAS TYPE	SIMPLE (GPS MODES)	1	SIMPLE (ATTI MODES)	2	COMPLEX	3
MAINTENANCE	NO KNOWN PROBLEMS	1	DUE FOR MAINTENANCE	2	CANNOT PASS PREFLIGHT	N/G
COMMUNICATIONS	VHF MOBILE & CELL PHONE	1	HANDHELD VHF OR CELL	2	NO RADIO OR CELL PHONE	N/G
ENVIRONMENT						
TEMPERATURE	BETWEEN 45 AND 80	1	UNDER 45, OVER 80	2	UNDER 20, OVER 95	3
VISIBILITY	OVER 3 SM	0	LESS THAN 3 SM (W/COA)	2	LESS THAN 1 MILE	N/G
WIND, INCLUDING GUSTS	0 - 10 KNOTS	1	10 - 20 KNOTS	2	20 to MFG MAXIMUM	3
					GREATER THAN MFG MAX	6
PRECIPITATION	NONE	0	RAIN/FOG	2	HEAVY RAIN, SLEET/SNOW	3
KP INDEX	1 TO 3	1	3 TO 6	2	7 OR MORE	N/G
TERRAIN	FLAT OR LOW HILLS	1	LARGE HILLS, SMALL MOUNTAINS	2	LARGE MOUNTAINS, CLIFFS	3
MISSION						
COMPLEXITY	SIMPLE TASKS, NO NEW TECHNOLOGY	1	COMPLEX TASKS, NO NEW TECHNOLOGY	2	COMPLEX TASKS, NEW TECHNOLOGY	3
# of sUAS TEAMS IN AOR	1-2 TEAMS	1	3-4 TEAMS	2	OVER 5 TEAMS	3
AIRCRAFT IN AOR	NO AIRCRAFT IN AOR	1	A/C IN AOR W/COORD	2	A/C IN AOR W/O COORD	3
TRAVEL ESTIMATE TO SITE	50 MILES OR LESS	1	51-100 MILES	2	OVER 100 MILES	3
TRAFFIC TO SITE	LIGHT TO NONE (RURAL)	1	MODERATE (CITY)	2	HEAVY (RUSH HOUR)	3
TOTALS						
FINAL ORM SCORE						

A "N/G" score in any of the ORM factors means no sortie is authorized under these conditions. The composition and conditions associated with the sortie must be changed, causing a change of the ORM score to within an appropriate risk scenario, prior to releasing a sortie.

OVERALL RISK ASSESSMENT	SIGNATURE	DATE
LOW RISK = 14-27, BRIEFING OFFICER APPROVAL		
MODERATE RISK = 28-37, AOB/OSC APPROVAL		
HIGH RISK = 38-49, WING/CC, DO, DOU or IC APPROVAL		

This form must be completed prior to launch. If the sortie is launched remotely, the Final ORM Score must be given to the briefing officer so that a phone approval may be granted. In the event of a phone approval the form must be forwarded to the appropriate party for signature after action.

During non-WMIRS, CAP AE activities/Events

- i. You must perform risk management as described in CAPR 160-1, using a CAPF 160. You can get recurrent events approved this way.
- ii. Periodically update the CAPF 160 to reflect any changes in risk for the activity.
- iii. Prior to each event, complete a CAPF 70-4R and maintain a copy in the event you are asked for it.

A copy of CAPF 160-1 follows. It is suggested that you fill it out immediately and keep it with you as part of your material when flying.

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CAPF 160 - DELIBERATE RISK ASSESSMENT WORKSHEET

1. ACTIVITY		2. DATE (DD/MM/YYYY)	
3. PREPARED BY			
a. Name (Last, First, Middle Initial)		b. Rank	c. Duty Title/Position
d. Unit	e. Email		f. Telephone
g. Signature of Preparer			

Five steps of Risk Management:

Identify the hazards => Assess the Risks => Develop Controls & Make Decisions => Implement Controls => Supervise and Evaluate

4. SUB- ACTIVITY, TASK, SOURCE <i>Example: Food service, food storage</i>	5. HAZARD / OUTCOME <i>Example: Food spoilage; food poisoning</i>	6. INITIAL RISK <i>Example: Severity = Moderate; Likelihood = Likely. Initial Risk = M</i> See matrix on page 3	7. CONTROLS <i>Example: Coolers with ice, replenished daily for food storage</i>	8. HOW TO IMPLEMENT / WHO WILL IMPLEMENT <i>Example: Load (number of) coolers, initial purchase (number of packs/bags) ice; purchase ice and conduct daily ice checks and runs to ensure coolers are stocked</i> <i>Who: SM (Name or Role)</i>	9. RESIDUAL RISK <i>Example: Resulting Likelihood = Seldom. Residual Risk = L</i> See matrix on page 3
		-		How: Who:	-
		-		How: Who:	-
		-		How: Who:	-

ADDITIONAL SPACES FOR ITEMS 4 THROUGH 9 PROVIDED ON PAGE 2

10. HIGHEST RESIDUAL RISK LEVEL - (Select the highest risk level value in Column 9, with all controls implemented):

EXTREMELY HIGH

HIGH

MEDIUM

LOW

NOTE: ALL RESIDUAL RISKS ASSESSED AS "H" OR "EH" MUST BE APPROVED BY CAP/CC

11. OVERALL SUPERVISION PLAN AND RECOMMENDED COURSE OF ACTION:

12. APPROVAL OR DISAPPROVAL OF MISSION OR ACTIVITY		APPROVE <input type="checkbox"/>	DISAPPROVE <input type="checkbox"/>
a. Name (Last, First, Middle Initial)	b. Rank	c. Duty Title/Position	d. Signature of Approval Authority

CAPF 160 - DELIBERATE RISK ASSESSMENT WORKSHEET

(Use CAPF 160HL if additional space is needed)

4. SUB- ACTIVITY, TASK, SOURCE	5. HAZARD / OUTCOME	6. INITIAL RISK	7. CONTROL	8. HOW TO IMPLEMENT / WHO WILL IMPLEMENT	9. RESIDUAL RISK
		-		How: Who:	-
		-		How: Who:	-
		-		How: Who:	-
		-		How: Who:	-
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		-		How: Who:	-
		-		How: Who:	-

CAPF 160 - DELIBERATE RISK ASSESSMENT WORKSHEET

Risk Assessment Matrix		Likelihood <i>(expected frequency)</i>				
		Frequent: Continuous, regular, or inevitable occurrences	Likely: Several or numerous occurrences	Occasional: Sporadic or intermittent occurrences	Seldom: Infrequent occurrences	Unlikely: Possible occurrences but improbable
Severity <i>(expected consequence)</i>		A	B	C	D	E
Catastrophic: <i>Death, unacceptable loss or damage, mission failure, or unit readiness eliminated</i>	I	EH	EH	H	H	M
Critical: <i>Severe injury, illness, loss, or damage; significantly degraded unit readiness or mission capability</i>	II	EH	H	H	M	L
Moderate: <i>Minor injury, illness, loss, or damage; somewhat degraded unit readiness or mission capability</i>	III	H	M	M	L	L
Negligible: <i>Minimal injury, loss, or damage; little or no impact to unit readiness or mission capability</i>	IV	M	L	L	L	L

Legend: EH – extremely high risk H – high risk M – medium risk L – low risk

NOTE: All residual risks identified as "H" or "EH" must be approved by CAP/CC

13. RISK ASSESSMENT REVIEW

a. Date	b. Name (Last, First)	c. Rank	d. Duty Title/Position	e. Signature of Reviewer

14. AFTER-ACTION FEEDBACK AND LESSONS LEARNED

Instructions for Completing CAPF 160 - Deliberate Risk Assessment Worksheet

1. Activity: Briefly describe the overall Activity for which the deliberate risk assessment is being conducted (e.g., SAREX, Wing Encampment, NCSA, etc.).

2. Date: The date of the activity.

3. Prepared By: Information provided by the individual conducting the risk assessment for the activity

4. Sub-Activity, Task, Source: Describe each sub-activity, task, and/or source of potential damage, injury, or illness.

Examples: *Sports Activity, relay race; Food preparation and service, food storage*

5. Hazard and Outcome: Describe the most likely event that could lead to an outcome (i.e. damage, injury, or illness).

Examples: *Running and falling - sprains, bruises, cuts; Food spoilage - food poisoning*

6. Initial Risk: Use the Risk Assessment Matrix on page 3 to determine the likelihood and severity of damage, injury, or illness before controls are decided and implemented. Select the resulting risk level.

Example: *If the severity of a sprain is determined to be **moderate** and the likelihood is determined to be **occasional** before controls are implemented, the initial risk is "M"*

7. Control: Describe or explain the risk controls and/or methods to be used to reduce the risk level associated with the hazard and outcome identified

Example: *The control for a sprain might be to **mark uneven surfaces with small orange flags and brief participants on their location***

8. How to Implement / Who Will Implement: Briefly describe how each control will be implemented and the name of the individual who has primary responsibility for implementing and monitoring the risk control.

Example: *Assign surface evaluation, flag marking, and briefing to a senior member by name*

9. Residual Risk Level: Using the same severity as in the initial risk assessment, use the Risk Assessment Matrix on page 3 to determine the resulting likelihood of damage, injury, or illness after controls are decided and implemented. Select the resulting risk level.

Example: *If the resulting likelihood of a sprain is **seldom** after controls are implemented, the residual risk is "L"*

10. Highest Residual Risk After Controls Are Implemented: Determine the highest residual risk level from block 9. NOTE: Any activity with residual risk identified as "EH" or "H" must be approved by CAP/CC.

11. Supervision Plan and Recommended Course of Action: Completed by preparer. Summarize the overall risk management plan for the Activity, including identification of individual responsible for on-going evaluation of plan and supervision of real time risk management.

12. Approval/Disapproval of Activity: The leader in charge of the event (Activity Director, Commander, Incident Commander, etc.) approves or disapproves the Activity based on the overall risk assessment in Block 10.

13. Risk Assessment Review: For on-going activities, the approval authority (Block 12) should appoint individuals with sufficient oversight of the activity to periodically review risk controls to determine if they are effective or if overall risk has changed. If the overall risk rises above the level already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations. Signature signifies review complete and event continues as planned.

14. After-Action Feedback and Lessons Learned: Provide specific input on the effectiveness of risk controls and their contribution to mission success or failure. Include recommendations for new or revised controls, practical solutions, or alternate actions. Submit and brief valid lessons learned as outlined in CAPR 160-1.

Additional Guidance: Use CAPF 160HL if additional rows are needed for hazard assessments.