CIVIL AIR PATROL
U.S. AIR FORCE AUXILIARY

Intermediate Risk Management

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Training Objectives

- Move on from “Basic” knowledge of RM
- Use RM in planning and execution of activities
- Understand and perform a Risk Assessment

Additional Guidance

- This lesson will take you through each step of the RM process
- Open up CAPR 160-1 § 3.1 and follow along with the steps

Risk Management Review

Five step process

- Identify – What can hurt you
- Assess – How likely and how badly?
- Controls – How can we prevent it?
- Implement – Build controls into the plan
- Evaluate – How well is the plan working?

The Loop

- Continuous process
- Look for changing or new risks
- Adjust your controls and the plan

Personal culture of Risk Management

"The goal of the CAP Safety Program is for **each and every member** of Civil Air Patrol, as well as the organization itself, to embrace and practice RM as a core competency of Civil Air Patrol." (CAPR 160-1 § 1.2.4.)

…the diverse and localized aspects of CAP operations and activities demand that individuals and groups fully understand and routinely apply safety RM processes as a matter of habit."

(CAPR 160-1 § 1.5.4.)

Every CAP member is expected to use RM practices "as a matter of habit" when engaged in any CAP activity. All activities have hazards and risks.

Risk Management Principles

1. **Accept no unnecessary risks**
   - Reduce risk as low as reasonably possible
   - Determine is residual risk (after controls) is low enough to allow the activity
2. **Make risk decisions at the appropriate level**
   - The person in charge of the activity usually decides if the risk is acceptable
   - Remember: Only CAP/CC can approve if residual risk is “High” or “Extremely High”
3. **Integrate RM into all missions and activities**
   - RM must be used in the planning, execution and debrief of all missions and activities
4. **Apply RM continuously. Before, during, and after**

Levels of Risk Management

Deliberate Risk Management

- Full and formal application of the RM steps
- Use the CAPF 160, *Deliberate Risk Assessment Worksheet*
- Used for large activities (e.g., NCSAs, Encampments, Flight Academies, etc.) (See CAPR 160-1 § 3.3.1.)

Real Time Risk Management

- Smaller events and activities
- Reduced planning time, but the same RM process
- Use the CAPF 160S *Real Time Risk Assessment Worksheet*

(see CAPR 160-1 § 3.3.2.)

What is a “Risk Assessment?”

What it isn’t…

- It is NOT just a form to fill out or a box to check off.

What is *IS…*

- The IMPORTANT first three steps of RM planning process.
  - Identify hazards
  - Assess risks
  - Develop risk controls

Use CAPF 160 or CAPF 160S to guide the process and CAPR 160 for requirements.

Getting Started

Congratulations! You have just been assigned to do a risk assessment for a large event! Don't worry, you are not alone.

Form a team

- Aircraft involved? Get Operations on your team
- Cadets involved? Get Cadet Programs on your team
- Vehicles involved? Get Transportation on your team
- Get members from involved departments to be on the planning team

Open a CAPF 160 and follow along for the rest of this briefing

Identify Hazards

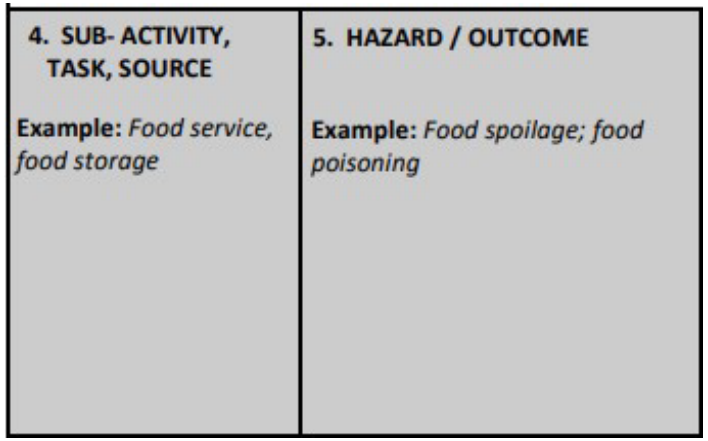
Every activity is made up of many smaller activities called "sub-activities"

- Look for hazards associated with the main activity
- Look at each sub-activity for hazards

Use blocks 4 and 5 of the CAPF 160 to list sub-activities and their hazards

Look for hazards using the "5 M's"

- Member
- Media
- Machine
- Mission
- Management



4. SUB- ACTIVITY, TASK, SOURCE	5. HAZARD / OUTCOME
Example: *Food service, food storage*	**Example:** *Food spoilage; food poisoning*

See "*Using the Five M's*" guide on gociviairpatrol.com

Identify Hazards

Gather your team

- Brainstorm to identify all the hazards
- What risks do they bring?

Questions for each sub-activity or task

- What can go wrong?
- What can break?
- How can someone get hurt?

What if…?

- What if something went wrong with a part of the plan?
- Has this event ben held before?
- What worked and what didn't?

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*

Assess the Risk

If a hazard can cause an injury, the risk is determined by

- The ***probability*** of the injury happening
- The ***severity*** of the injury if it occurs

Probability + Severity = Initial Risk level

> **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"*

Use the risk Matrix on page 3 of the CAPF 160 to determine the risk level for each hazard

Assess the Risk

For each hazard, use the matrix to

- Estimate the probability of an injury or damage
- Estimate the severity if it does occur

Read across and down to get the initial risk

- Be honest
- Use realistic worst-case scenario
- Discuss with your team

Risk Assessment Matrix		Likelihood *(expected frequency)*				
		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 *(expected consequence)*		**A**	**B**	**C**	**D**	**E**
Catastrophic: *Death, unacceptable loss or damage, mission failure, or unit readiness eliminated*	**I**	**EH**	**EH**	**H**	**H**	**M**
Critical: *Severe injury, illness, loss, or damage; significantly degraded unit readiness or mission capability*	**II**	**EH**	**H**	**H**	**M**	**L**
Moderate: *Minor injury, illness, loss, or damage; somewhat degraded unit readiness or mission capability*	**III**	**H**	**M**	**M**	**L**	**L**
Negligible: *Minimal injury, loss, or damage; little or no impact to unit readiness or mission capability*	**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

Develop Risk Controls

Prioritize the risks

- Focus first on the hazards that bring the highest level of controls
- Try to eliminate those hazards that bring it to H or EH

Prioritize the risk controls

- There may be numerous ways of controlling each risk
- Focus on the risk controls that have…
  - The benefit or the most effective at reducing the risk
  - Balance with cost, effort and available resources.

Develop the Risk Controls

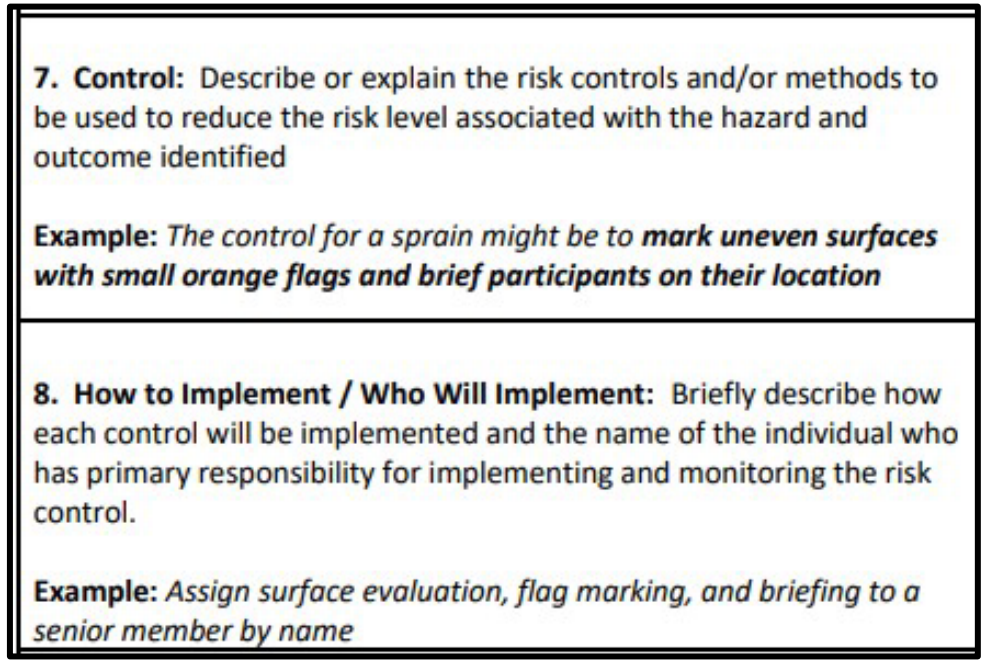
Ask yourself what is causing that risk. Target your controls to eliminate that root cause.

- **Eliminate** the risk- Is the event or piece of equipment necessary?
- **Reduce** exposure to the hazard- Is there shade available? Heat? Can you reduce the number of people on the flight line?
- **Train** people-how to avoid the hazard. How to perform a task correctly
- **Warn** people- Briefings, signs, cordons and supervision are some ways to warn people of a risk
- **Prepare**-Proper rest, nutrition, hydration, clothing, equipment
- **Improve** the design- Make a task more efficient. Don't try to do "too much"
- **Supervise**-Assign spotters, watch weather conditions, call "knock it off"

Develop the Risk Controls

For each hazard listed:

- Use blocks 7 & 8 on the CAPF 160 to enter the risk control you selected.
- You may have more than one control for each hazard
- Describe HOW you will implement each control and how it will be monitored
- Enter the name of the person responsible for the control.



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*

Assess the Residual Risk

With your controls in place and working, each risk should be reduced.

- This risk is called the “Residual Risk”
- This is the risk that remains after your plan is in place
- Use the Risk Matrix again to determine the level of your residual risk
- Enter this into block 9 of the CAPF 160
- If the residual risk is H or EH then this must be approved by CAP/CC

9. RESIDUAL RISK

Example:
Resulting Likelihood = Seldom. Residual Risk = L

See matrix on page 3

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 implements, the residual risk is "L"*

Communication

Everyone needs to know the plan.

- Every activity is unique
- Every risk management plan is also unique

If done properly, the risk controls won't seem like an "add on"

- They should seem seamlessly integrated into the activity plan
- Participants should understand the plan
- Participants should understand their role in the plan and in risk management

Communication

Well in advance of the activity:

- Advise all participants of the plan to help them prepare
- Offer training, advice on equipment, weather considerations
- Consider sharing the CAPF 160 or a summary of hazards and risk controls

Immediately before the activity:

- Brief all participants. Everyone needs to be on the same page
- Review all the basics of RM
- Review terminology, especially “knock it off”
- Review risk controls and emphasize the items with the highest levels
- Verify that they are prepared. Trained? Rested? Hydrated? Equipped?

Real Time Risk Management

Every large activity is made up of smaller activities

- Treat each of these as a small separate event. That means a risk assessment

Gather the participants

- Discuss the hazards- “what can go wrong?”
- Discuss the controls- “What can we do to decrease that risk?”
- Make sure everyone knows of their responsibilities

Use the CAPF160S as a guide

The RM “Loop”

One of the most important components of RM is the Loop. This means that RM is a continuous cycle.

Supervise and Evaluate

- Everyone must watch for new hazards, risks or ineffective controls
- Risk controls can, and should, be updated and improved
- Consider a “knock it off” if big changes are needed

After action and lessons learned.

- Gather your team
- Discuss what controls worked and what didn’t
- Document your lessons learned in block 14 of the CAPF 160
- The after-action report is useful the next time this event is held

Intermediate Risk Management

By now you should:

- Have a deeper understanding of the risk management process
- Be able to lead a risk assessment for a CAP activity
- Be able to help your CAP teammates understand the RM process

For more information on risk management, refer to the following:

- CAPR 160-1 CAP Safety Program
- Safety pages of gocivilairpatrol.com
- CAPF160 and CAPF 160S

Questions?

We need your help!

If you have any questions or suggestions about CAP Safety Education and Curriculum, please email us at Safety@capnhq.gov

Thank you!