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U.S. Department of  
Homeland Security  
**United States  
Coast Guard  
Auxiliary**



# **National Response Directorate 2020 Aviation Workshop**

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## Disclaimer

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This content is a supplement to the topics and content required by the Operations Policy Manual for Aviation Workshops.

It is **NOT** a replacement for the annual Aviation Workshop or its prescribed content.





# Agenda

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- Safety and mishap reporting
- Facility inspections and reporting
- General reminders
- Aeromedical factors
- ORM (Operational Risk Management)
- Communications
- AUXDATA Order Management (AOM) System
- Professionalism



# Training and Safety

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- SAFETY is our primary concern
- Train to “proficiency”
- Training Drives Proficiency
- FAA Wings Program Increases Safety and Proficiency



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- Even though the mission is important, safety is of prime importance in our training.
- What training primarily most focuses on Safety? Discuss how training impacts flight safety.
- Don't be a member of the “Minimums Club” Discuss examples of training that drives Proficiency. In what ways does training **stress excellence?**
- AUX SAR Flight Check in alternate year from your BFR



# Mishap Reporting

- ALL mishaps ***must*** be reported through the Flight Safety function immediately
- A Coast Guard mishap is defined as any unplanned, unexpected or undesirable event that causes injury, occupational illness, death, material loss or damage
- Additionally the Auxiliary wants any incident which causes a disruption or alteration of the mission reported
- This allows the mishap to become an education opportunity to be shared across the entire organization



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Per COMDTINST\_M5100.47.pdf - a Mishap is “An unplanned, unexpected, or undesirable event or series of events resulting in death, injury, occupational illness, or damage to or loss of materiel. “

Need to define MISHAP. Anything causing an unplanned stop besides a comfort stop is potentially reportable. Certainly any mechanical or maintenance issue, but people should use common sense in what they report. Anything that you expect to be reimbursed for should definitely be reported. That being said, it is better to over report than under report. Nobody will be criticized for reporting too much. When in doubt report it.

Operations Policy Manual requires those with firsthand knowledge of a mishap to report it. Let's talk about that.

If you are confident that the principle parties are reporting to the organization, redundant reporting is not needed unless requested.

Why are they requesting that all mishaps; with or without injuries and

even if there is no damage be reported?

Whenever a mishap occurs, even with no real damage or injury, is reported this information can be used to aid other members of potential risks and how this risk can be avoided.

This information you provided can be used as a learning or teaching event that can help all of us to become safer.



# Mishap Reporting

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Who Reports the Mishap?

Who the Mishap is Reported to?



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Discuss: Who you gonna' call? Suggest keeping call and time logs of notifications/responses.

DFSO is the first and most essential report. If you can't reach the DFSO then Air Station FSO (Flight Safety Officer) or Air Station Operations Officer (OPS)

Air Station FSO?

Air Station CO/OPS if there is a safety of flight issue? Maintenance release.

DFSO reports up the chain if it is appropriate.

DSO-AV and AAC?

All Districts report all mishaps to:

Dr. Jeffery Kyff , Branch Chief, Flight Safety (BC-RAS)

[Baron138q@aol.com](mailto:Baron138q@aol.com)

Aviation Division

National Response Directorate



# Mishap Reporting

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As soon as practical:

- Pilot reports mishap to:
  - OIA
  - District Flight Safety Officer (or FSO-AV if DFSO is unavailable)
- DFSO reports mishap to:
  - District Commodore directly
  - National Flight Safety Officer
    - If approved by DCO, may coordinate with DSO-AV

NOTE the safety of the crew is 1<sup>st</sup> priority!

If DFSO is unavailable the pilot should contact the Active Duty FSO and leave a voice message (or 2) for the DFSO about the MISHAP along with the status of coordinating with the Active Duty FSO. The pilot should request a return call from the DFSO with the best number to call.





# Mishap Reporting

- Mishap reporting does not equal punishment
  - However this does not apply for reckless or foolhardy actions.
  - Incidents occur
  - **Not reporting a mishap may lead to punitive action**

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# Inspection Requirements

Annual Inspections  
**AND**  
100 Hour Inspections (as required)  
**OR**  
Approved progressive inspection program

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**AND**  
Oil Analysis at 100-hour (maximum) intervals



Must be completed and reported to District/Region record keeper by the due date or orders may not be issued.

Annual Inspection – Expires on the first day of the month 1 year after current annual. If facility exceeds 100 hours a 100 hour inspection is required.

For progressive inspections, report completion of the progressive program by the appropriate interval.

SOAP before reaching 100<sup>th</sup> hour from last SOAP. If 100<sup>th</sup> hour is reached, aircraft is not current and cannot fly missions.

The review by aircraft's mechanic must be documented and submitted. Compliance with lab/mechanic recommendations is required.

Discuss: What if these occur at a time when an Offer of Use is not yet due?

(The document image can be sent to the record keeper.)



# Maintenance Reporting Requirements

- Maintenance Reporting Requirement to AUXAIR and Coast Guard Leadership
- Timely Maintenance Reporting is Mandatory
- There are Penalties for Not Meeting the Maintenance Reporting Requirement



-District/Region Records are real-time and must be reported quarterly up the chain to AUXAIR leadership and CGHQ. i.e. If status is due and not reported, mark the facility “not current” and submit the report on time.

-Failure to timely report can jeopardize operational status for the facility or the District/Regional program.

- The Maintenance data spreadsheet must be available to the air station.



## Reminders

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- Aircraft Procedures
  - Checklist Discipline
  - Challenge and Respond
  - Emergency Procedures and Trouble Shooting



Confirm procedures flow with the checklist every time.

Always involve your flight crew, especially preflight. Talk through the checklists.

How would you access that information in the cockpit? POH, existing checklist, etc.? Brief take off emergency procedures prior to take off then have emergency procedures checklist from POH emergency procedures “front and center” and available throughout the flight.



# Aeromedical Factors

## MEDICATIONS

Know the effects and side effects of

**ALL**

the medications, both prescribed and over the counter as well as supplements, you are taking!

## **ARE THEY FAA APPROVED WHEN FLYING?**



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## **MEDICATIONS**

All medications, drugs & treatments (Both Rx & OTC) are to be reported to your AME/Flight Surgeon at the time of your physical and as soon as prescribed, dosage or schedule changed or adverse/side effects develop or vary. Self-grounding is necessary until cleared.

### Over-The -Counter Medications

Airmen who develop short-term, self-limited illnesses are advised to avoid performing aviation duties while medications are used. The first time use of any medication requires a 24-hour grounding period to ensure the user is free of significant side effects.

The FAA does **not** maintain a list of “Approved” medications because “Aeromedical decision-making includes an analysis of the underlying disease or condition and treatment.”

The clearance of a medication from the body is dependent on one’s general health (liver & kidney function), hydration, diet, activity, use of other medications and physiologically active metabolites (break down

products) of the medication.

Example...Benadryl is an allowed medication BUT you must wait **60** hours between taking the last dose and flying

When a medication use has ended, the “No Fly” status should continue until:

Signs & Symptoms of the illness or it’s complications are resolved

The Aviator is free of adverse/side effects of the treatment

Five (5) half-lives of the drug have passed

The half-life of a drug is an estimate of the period of time that it takes for the concentration or amount in the body of that drug to be reduced by exactly one half (50%). The symbol for half-life is  $T_{1/2}$ .

To Calculate a drug half-life:

<https://www.drugs.com/article/drug-half-life>





# Aeromedical Factors

## MEDICATIONS

### ARE THEY PROHIBITED?



Note: Marijuana is not legal for use under federal law



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Search “aviation do not fly medications” to see the various websites with types and categories of medications and how they pertain to pilots

**There are basically two categories of Pharmaceuticals which show:**

**Do Not Issue**

**Do Not Fly**

**We don't expect you to be a doctors; what is important is that you discuss all medications with your AME**

NOT Part of Standard Presentation

If a participant asks what medications are not allowed refer, or them to below link

[https://www.faa.gov/about/office\\_org/headquarters\\_offices/avs/offices/am/ame/guide/pharm/dni\\_dnf/](https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/am/ame/guide/pharm/dni_dnf/)

**Note to Instructor. On the “Marijuana is not legal for use under federal law” bullet there will be NO additional discussion or clarification**



# Aeromedical Factors

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## **HYDRATION**

We live in different climatic regions and are all physiologically different, so all we can do is describe the standards for average conditions. Adjustments must be made depending on the circumstances.

A few hot weather causes of dehydration are hot cockpits and flight lines, wind, humidity, and diuretic drinks - coffee, tea, alcohol, and soft drinks-changes in climatic conditions, sunburns, and improper attire for conditions.

Some common signs of dehydration are headache, fatigue, cramps, sleepiness, and dizziness.

### **Preventing dehydration**

To help prevent dehydration, you should drink two to four quarts of water every 24 hours.

Drink cool (40° F) water (forget the old "sports day" theory that lukewarm water is absorbed faster into the system).

Carry a container so you can measure daily water intake.

Don't rely on the thirst sensation as an alarm...stay ahead. If plain water is offensive, add some sport drink flavoring to make it more acceptable.

Limit your daily intake of caffeine and alcohol (both are diuretics and stimulate increased production of urine)

Exercise can cause a large amount of body fluid loss that is difficult to replace quickly.

Acclimation to a major change in weather takes one to two weeks.

Monitor personal effects of aging, recent illness, fever, diarrhea, or vomiting.

Monitor your work and recreational activity; if you feel light-headed or dizzy, call it a day.

In extreme heat and exercise conditions, salt and electrolyte loss is a factor but not for the average person with a moderate exercise program. The American diet takes care of the loss.



# Aeromedical Factors

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## **FATIGUE**

Human factor studies have identified fatigue as a significant factor impacting aircrew judgment and operational performance. Fatigue is alleviated and mental alertness is restored by proper sleep. Irregular and insufficient sleep patterns can create both immediate and long term (or chronic) fatigue. Noise, poor climate, bright light, excitement, worry, daytime sleep period, or any other condition that is not conducive to restfulness will diminish the benefits of sleep. Optimum amount of sleep varies but the normal standard for flying personnel is eight (8) continuous hours in every 24-hour period.

Factors such as excessive fatigue, illness, and emotional stress tends to increase this standard. Mishap experience and studies indicate that any decrease in a flight crewmember's ability to sleep will impact normal performance functions and increase the likelihood of error.



# Aeromedical Factors

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## I'M SAFE

- I = Illness, Do I have an illness or symptoms of illness?
- M = Medication, Am I taking prescription or over-counter drugs?
- S = Stress - Am I under psychological pressure from the job? Worried about financial matters, health problems or family discord?
- A = Alcohol, Have I been drinking within eight hours? Within 24 hours?
- F = Fatigue, Am I tired and not adequately rested?
- E = Eating, Am I adequately nourished?



Although the FAA says 8 hours, the Auxiliary says no alcohol within 12 hours.

A hangover can extend beyond 12 hours.

All crew members should review IMSAFE pre-flight



# Aeromedical Factors

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- Effect on you and your crew, CRM, crew effectiveness and safety



Would you want to fly with **you?**

How about with your crew mates?

Aeromedical or Medications questions? ...please  
contact our National Flight Surgeon Dr, Mark Perni, BC-RAA



## What is Risk Management

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A **continuous**, systematic process of identifying and controlling risk in all activities according to a set of pre-conceived parameters by applying appropriate management policies and procedures.

This process includes detecting hazards, assessing risk, and implementing and monitoring risk controls to support effective, risk-based decision-making.

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Note the word **CONTINUOUS** . Risk Management must be done throughout the mission not just at the beginning for a GAR score, and just for Surface or Air operations





## Operational Risk Management (GAR Model)

Low – Medium - High



- We are required to use the GAR 2.0 model
- Any single Medium on an item should raise a concern
- Collective effort of the entire crew not just PIC. Suggest crew input first then PIC input and discussion of concerns.
- The overall rating is not an average of the

# individual score but rather an Overall Rating

- Done before **AND** updated throughout the mission when **ANY** condition changes



## Operational Risk Management (GAR 2.0 Model)

### General Assessment of Risk

- 5 step process. Identify, Assess and Mitigate Risk Elements then Monitor and Adjust, if necessary, Mitigation Efforts.
- PEACE (Risk Assessment)
- STAAR (Mitigation Options)
- RAM (Risk Assessment Matrix)



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- ACN 030/18-MAR 2018  
Promulgation of Risk Management Commandant Instruction

Planning

Event Complexity

Assets

Communication and Supervision

Environment

Spread out

Transfer

Avoid

Accept

Reduce

**RAM** -after assessment of risk for each item consider likelihood, severity and

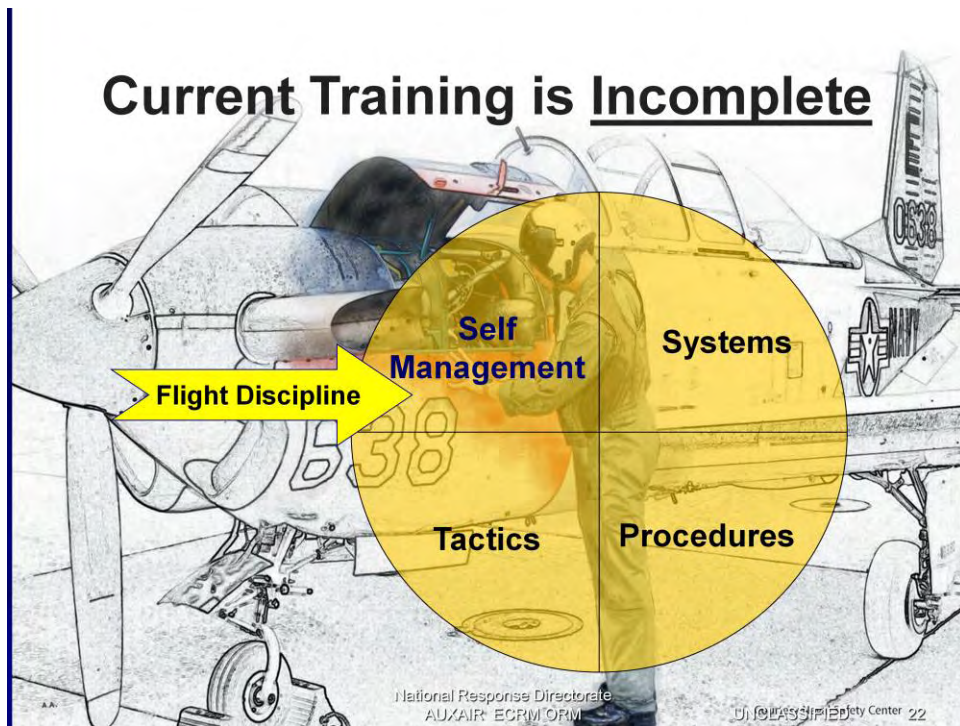
reduction for mitigation



## Operational Risk Management (GAR 2.0 Model)

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- **Risk Management** is a continuous process
- Controls must be monitored:
  - Are controls effective?
  - Have elements changed that may impact the original RM 2.0?
- Real-time assessments
- Flight Discipline



CLASSIC SYSTEMS DESIGN

PROCEDURES TACTICS

MUST ADD FLIGHT DISCIPLINE (SELF  
MANAGEMENT)

PLUS we must be experts in managing  
ourselves and each other for Operational  
Risk Management.



# Radio Communications

Must have 2 way communications with an external entity at **all** times

- Guard with:
  - USCG
    - » Sector, Boat Station, Cutter, Aux Radio, Other entity
  - ATC:
    - » as required for airspace and/or flight environment (IFR, etc.)



If comms are lost, RTB & call OIA/Sector

Typically guard is with sector. The other contacts are for when sector can't be reached or when working directly with the other CG unit.

ATC (flight following) is often useful when air space and radio traffic is extremely busy or a CG unit is beyond radio range.

In an urgent situation, a cell phone call, or text with confirmation of text from recipient, can prevent an unnecessary concerns,

Discuss FCC rules and consequences of alarm [with](#) CG



# Radio Communications

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- Listen first
- Think about what is to be communicated
- Then key the microphone







## AOM Notes

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- Use mission code O1D for pre- and post mission activities
- Time in the itinerary must be consecutive with no gaps or overlaps.



Breaks in the flight of over 1 hour should also use standby code O1D

No breaks or overlaps. If one category ends at 1200, the next begins at 1200, NOT 1201 or later.



## AOM Notes

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- Meals:
  - Must be selected manually for each member
  - If you receive meals at no cost from the Coast Guard, check “Government Provided” box
  - Payments for provided meals go to owner or operator
    - Operator should provide appropriate meal(s) to crew or pass along funds



Click on the crew member’s name, check the meal, be sure to save.

Meal allowance is permitted only when food is actually provided.

If government meal is provided, do not claim reimbursement.



## AOM Notes

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- Who can be listed as “Operator?”
  - Owner on board:
    - Owner can select any member qualified and current as Auxiliary PIC
  - Owner not on board:
    - Qualified, current Auxiliary pilot listed by owner on 7005 form

check to see if you need to add/delete anyone



### Continuing problem: Facility Offer for Use untimely expiration



Validity interval is exactly 1 year plus 45 days

AOM / AUXDATA checks against TODAY's date as opposed to date of mission for facility status

AUXDATA will automatically remove facility from operational status next day after validity interval



## AOM Notes

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- If mission is not flown remember to CANCEL order in AOM
- Case #1:
  - Facility valid time expires between order issuance and date of mission
  - Result
    - Mission is not authorized and must not be flown

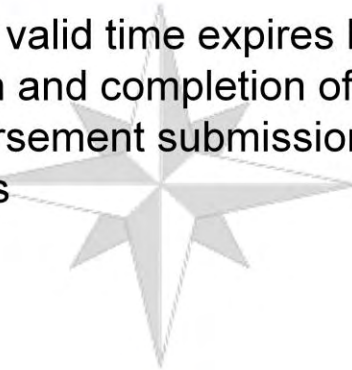
Pilots need to confirm in AOM that the mission is still authorized no earlier than 24 hours before the flight. Print out a copy of your orders.



## AOM Notes

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- Case #2:
  - Facility valid time expires between mission and completion of reimbursement submission/approval process



### Result:

Reimbursement process is interrupted and cannot be completed until new offer for use is recorded in AUXDATA and facility restored to operational status

### Remedy:

AOM generates warning to owner (and FC) 45 days before anniversary of previous offer

90 days are thus available for renewal process

New Offer for Use form

Re-inspection

DIRAUX approval

AUXDATA entry

AUXDATA sends a notice that warns of expiration, but cites a due date that does not include the 45 days until facility becomes non-operational



## Training Requirements (AUX-17 & AUX-18)

- AUX-17 is now required prior to certification in any Aviation Qualification
- AUX-18 is now required prior to certification in any Pilot Qualification
- Must be re-taken every 5 years to stay current



AUX17 is required every 5 years for pilots, air crew, and observers. AUX18 is required every 5 years for pilots. By 2022 most pilots, air crew, and observers will be taking as recurrent training.

Plan ahead – you may take the classes ahead of schedule. Waiting until 2022 may result in aviators being closed out of classes required for currency.

Suggest that every District needs to send their aviation qualified members to AUX-17 as soon as possible.

# **Recurrent CRM Requirements**

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- A recurrent CRM class must be completed annually (typically at the Flight Safety Workshop). No later than 15 months after the last annual CRM or AUX-17
- Active Duty FSOs, or DFSOs who took the 2019 AUX-14 course may instruct





# Professionalism

**Professionalism in aviation is the pursuit of excellence through discipline, ethical behavior, and continuous improvement.**

(NBAA. National Business Aviation Association)



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## **Remember Actions Speak Louder than Words.**

**Recurrent and Proficiency Training**...Participating in a continuous proficiency program, with varied flight and knowledge challenges, gives us confidence while keeping our airmanship skills sharp.

**Good Judgement**...This can be demonstrated by saying "No" to a mission for any reason where the Risk outweighs the Gain. Safety of your crew, your passengers and yourself are your first priority.

**Adherence to CG, AuxAir and FAA Regulations and Guidance**...Remember if you are involved in an accident or mishap adherence to the regs could save your bacon.

**Uniforms**...Is the entire crew in clean, well maintained and proper uniform? How about your PPE? PLB expired? Fresh batteries in your strobe, flash light, etc?

**Demeanor**...Relaxed yet professional

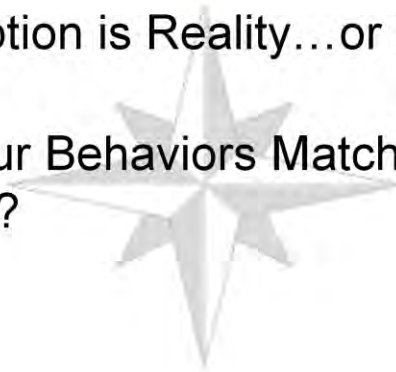
**Your Facility**...Is it well maintained with FAA and AuxAir inspections and offer for use up to date and logged? If you have an accident or mishap your logs will be inspected. Is the cockpit organized and clean or is it a cluttered stinky boar's den with empty water bottles and food wrappers from your last 3 flights still onboard?



# Professionalism

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- Perception is Reality...or is it?
- Do Your Behaviors Match Your Words?



**What it means...that for others, be they your peers, subordinates, or superiors, is how they perceive you is reality to them—and how you perceive yourself has nothing to do with it.**

**...It means that your behaviors and their results matter infinitely more than your intentions.**

**How do you think AuxAir is perceived...by Active Duty Air Stations? By our Sectors? How about our fellow Auxiliarists who are not involved in Aviation?**



# Thank You!



Thank you for your participation!

We seek your feedback on the content of this presentation.

Send your comments to:

Division Chief – Education  
[Bruce.Pugh@cgauxnet.us](mailto:Bruce.Pugh@cgauxnet.us)

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