

Understanding & Balancing: Situational Awareness Task Management Basic Air Work



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Overview

- Definitions & Concepts
 - Situational Awareness
 - Task Management
 - Basic Air Work
- Balancing Concept
- Common Errors

Situational Awareness (SA)

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 - More specifically, it is also an exact awareness of where you are and what is the next event/point during the flight
 - The next event/point could be:
 - A geographical point such as a fix or navaid
 - An air work need such as a level off, a climb, or a turn
 - By knowing what event/point is next gives you:
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 - SA has an direct affect on your task management and basic airwork

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 - It will shrink and grow during any given flight
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- How do you know you've lost SA?
 - When you get SA back!

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 - Set up instruments to help you
 - Set CDI to help with legs during radar vectors to final approach course (RV FAC)
 - Set nav aids to those which help position you and keep awareness via bearing pointers & courses
 - Set altitude/heading/airspeed bugs as reminders of what you need to maintain

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 - You will have multiple tasks in varying stages of accomplishments during flights (multi-tasking)

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 - With more time, you will see recurring situations which will help you to readily identify patterns of task accomplishment
 - Given various acronyms in IGS to help identify and manage required tasks:
 - ABCDs – ATIS/Brief/Cockpit Setup/Descent Check
 - 6-Ts – Time/Turn/Time/Transition/Twist/Talk
 - DLIDS – DME Hold/Loc Freq/Inbound Course/Display/Speed
 - LDDHA – Load Approach/Direct To/Display/Holding/Approach Mode

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Basic Air Work (BAW)

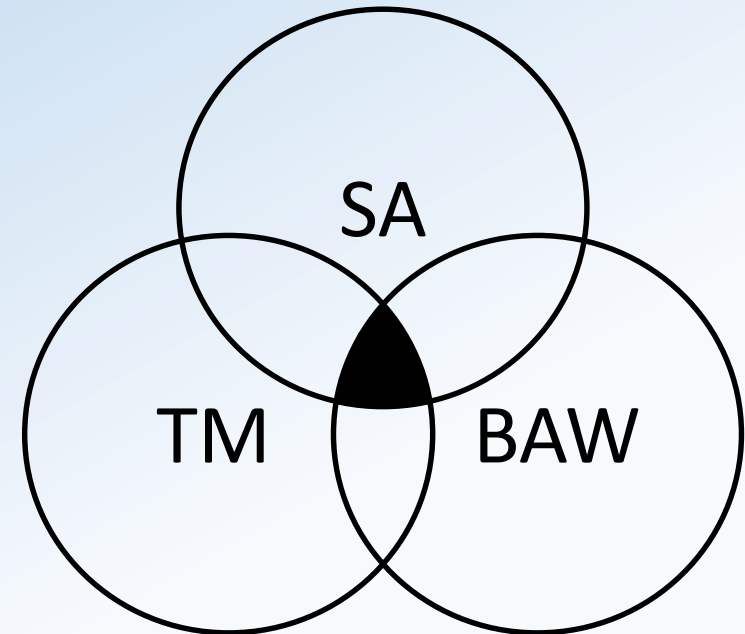
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- By this point...you KNOW HOW to fly the aircraft by instruments...it's the rules & procedures you are now learning to apply

Balancing SA/TM/BAW

- Understanding the individual elements is the easy part
- During the flight, the difficult part is maintaining each of the elements in balance
- By learning how to balance the elements you:
 - Learn how they are co-dependent
 - Gain insight into why you make errors
 - Are able to effectively accomplish the mission/event

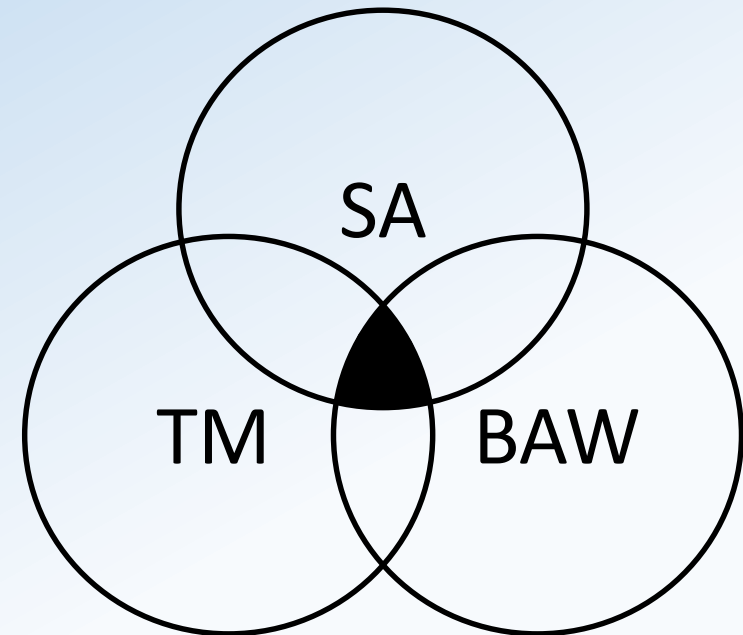
Balancing SA/TM/BAW

- Utilize a Venn diagram
 - Shows logical relations between different elements (balance)
 - Visual aide to a conceptual process
 - Helps us to see what causes errors in our flying execution
 - If we know cause...we can learn to correct/avoid



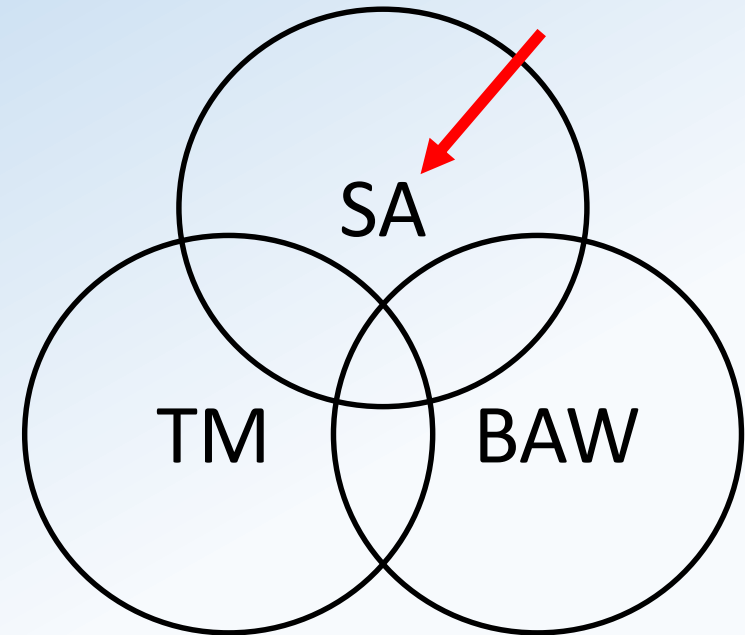
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- Is one element more important than the others?
 - Many opinions...SA is best place to start from vice BAW
 - SA would be the first “ball” to throw in the air to start juggling



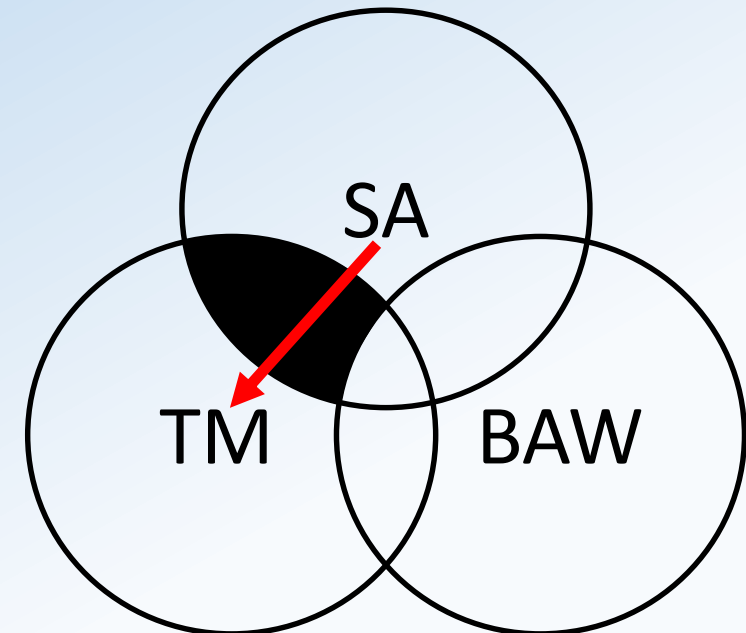
Balancing SA/TM/BAW

- Start with SA
 - You need to constantly know where you are & what's the next event/point
 - Gives a spatial sense as to how long/far you have available
 - Helps set the stage for “what” needs to be done prior to reaching the event/point (TM) & how quickly



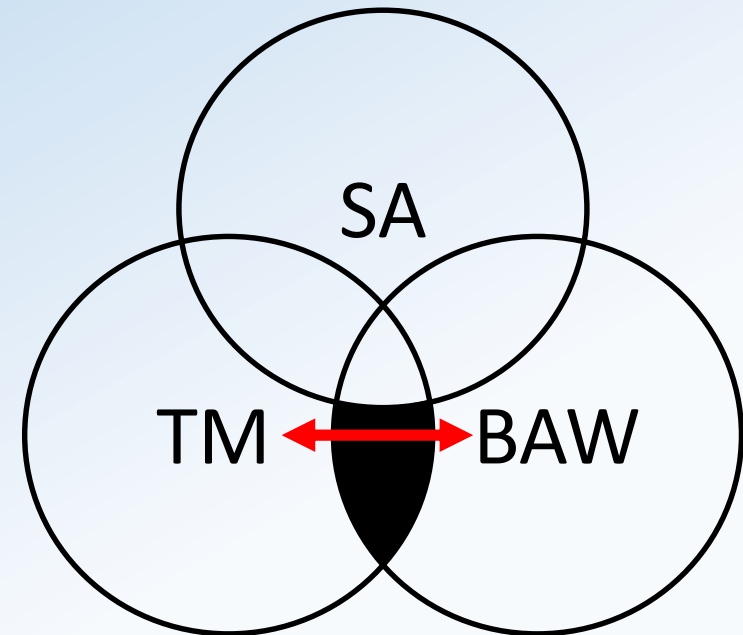
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- Move on to TM
 - Once you know what the next point is, you can identify tasks that need to be accomplished prior to the point
 - The spatial orientation (time/distance) helps you prioritize or order the tasks
 - Management is also the balanced working of the multiple tasks thru their completion (you will be multi-tasking)
 - Helps set stage to balance task completion with BAW



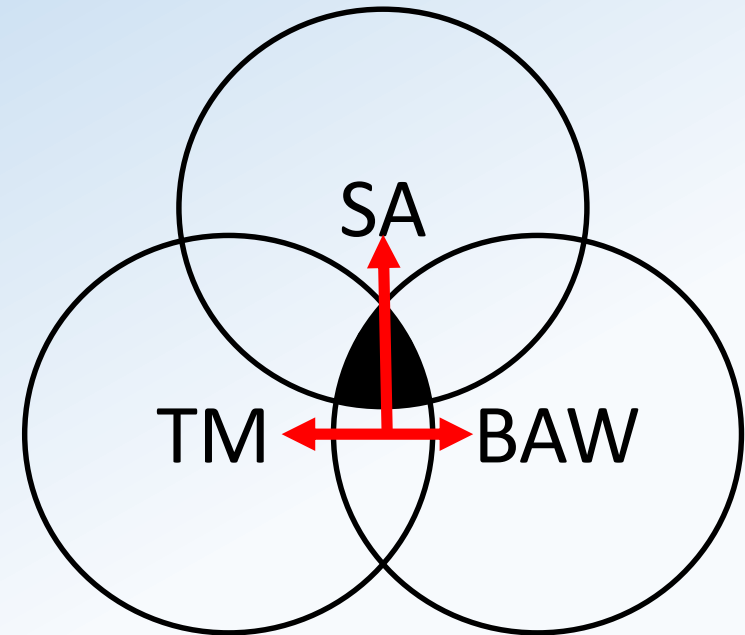
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- Move on to BAW
 - As you accomplish TM, need to balance time between doing tasks and flying aircraft
 - Will not be able to just “do a task” without scanning and maintaining aircraft control...examples:
 - Frequency changes
 - Approach briefing
 - Chart reading
 - FMS data entry
 - Learn to break up task accomplishment into sections
 - Back to a full scan every 3-4 seconds
 - Realize body movement affects control movement



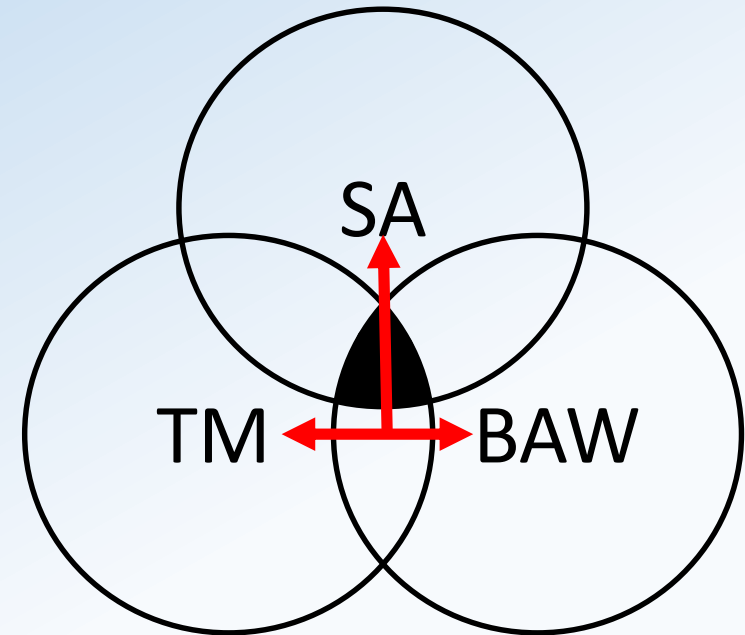
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 - Validates special orientation of time/distance remaining
 - May drive changes to task priority or order



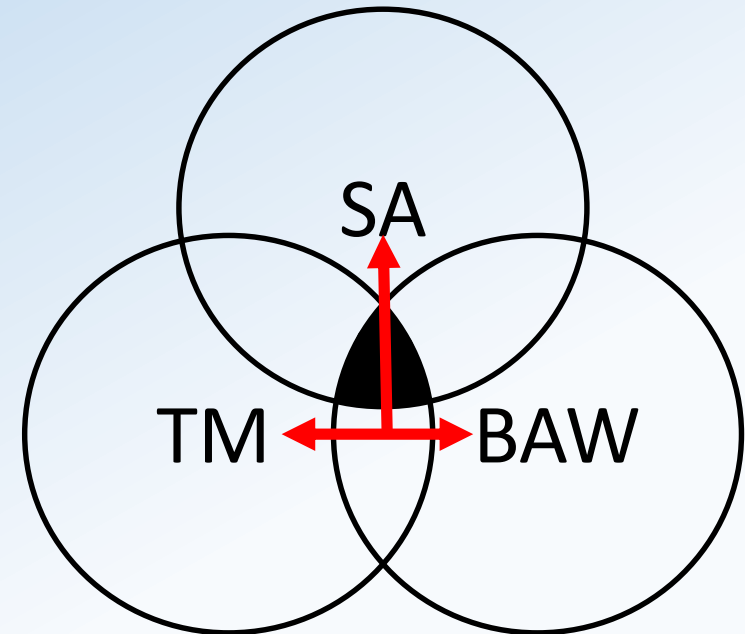
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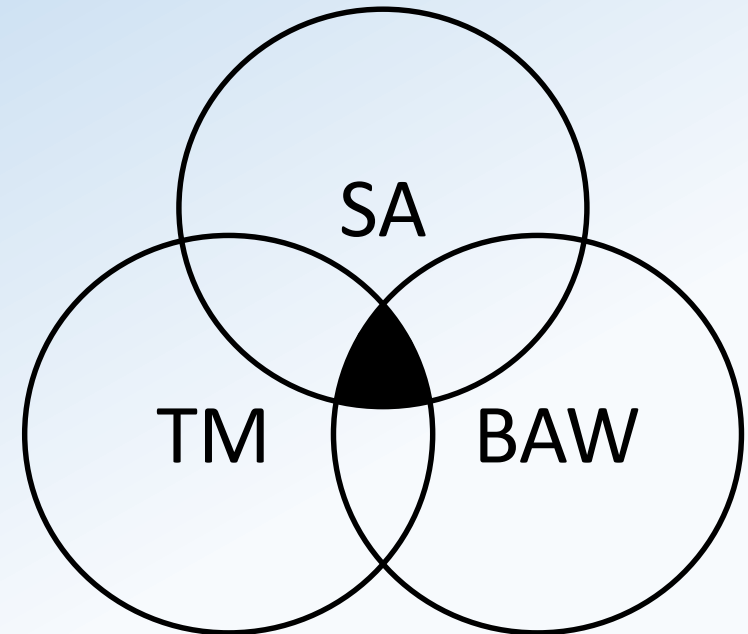
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 - Validates special orientation of time/distance remaining
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- Completes the balance concept
- Use of diagram
 - Learn the true reason for an error & not just an easy answer
 - One item can have 3 different causes (example – level off at altitude)



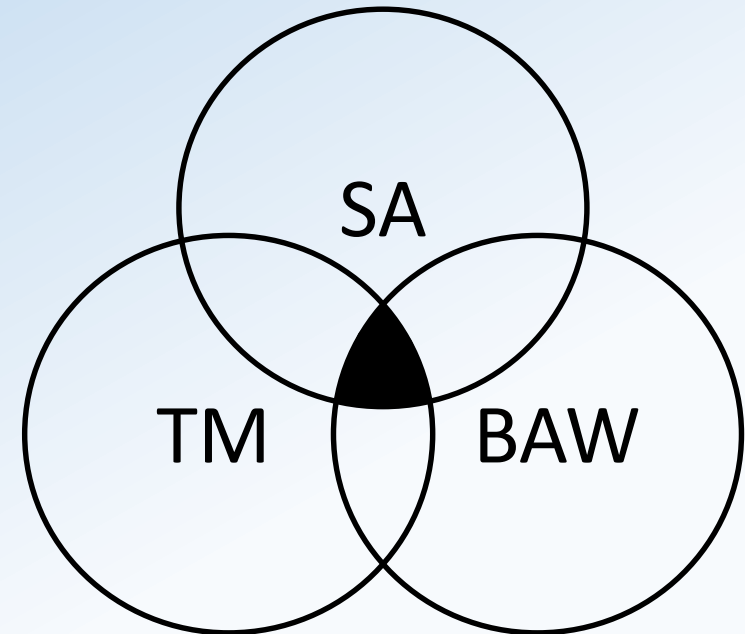
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 - Follows thru to poor BAW from being rushed



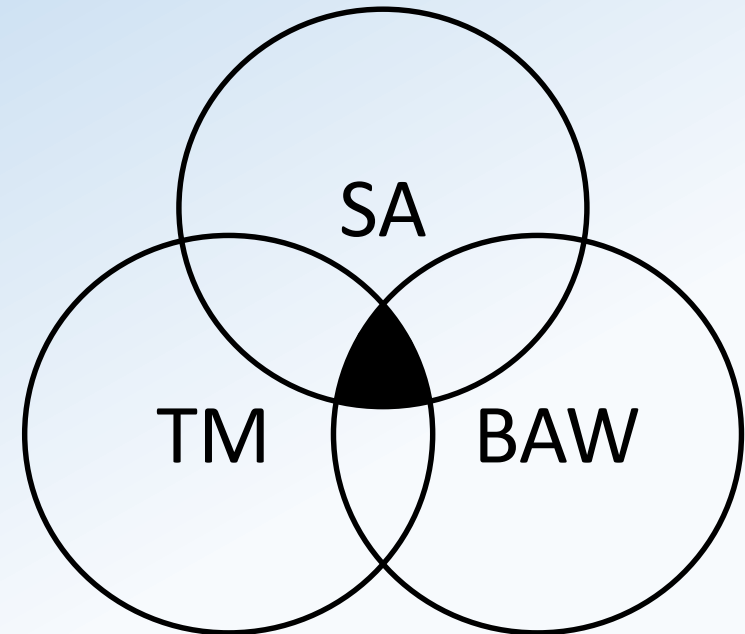
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 - Leads to poor TM
 - Follows thru to poor BAW from being rushed
- Focusing on TM and not balancing with BAW
 - Fail to go back to scan every 3-4 seconds
- Focus on BAW leading to loss of SA & TM
 - Just flying...no real priority to get things done



Summary

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