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Surface Warfare Proficiency Knowledge Management Architecture

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Monterey, California: Naval Postgraduate School

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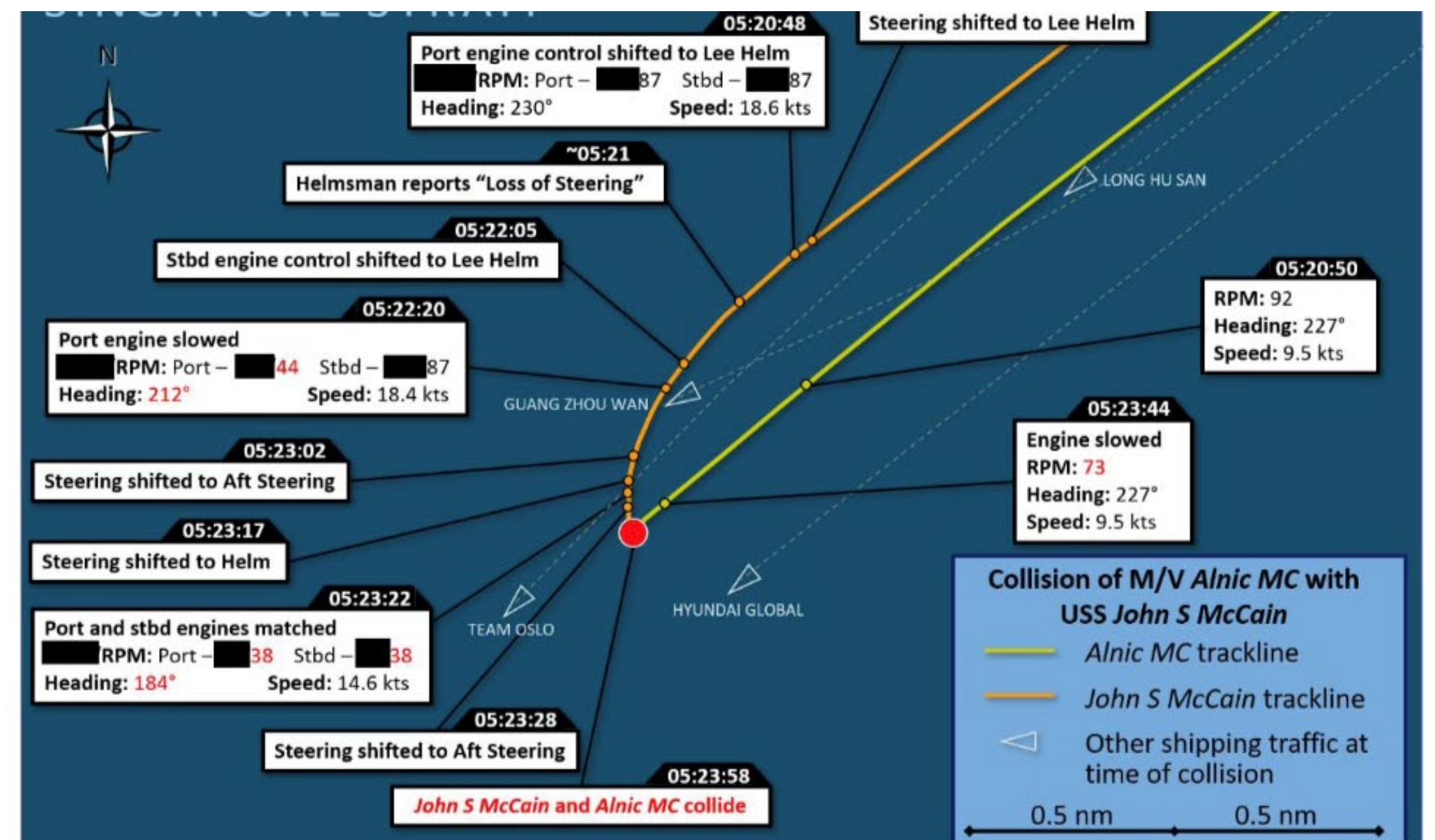
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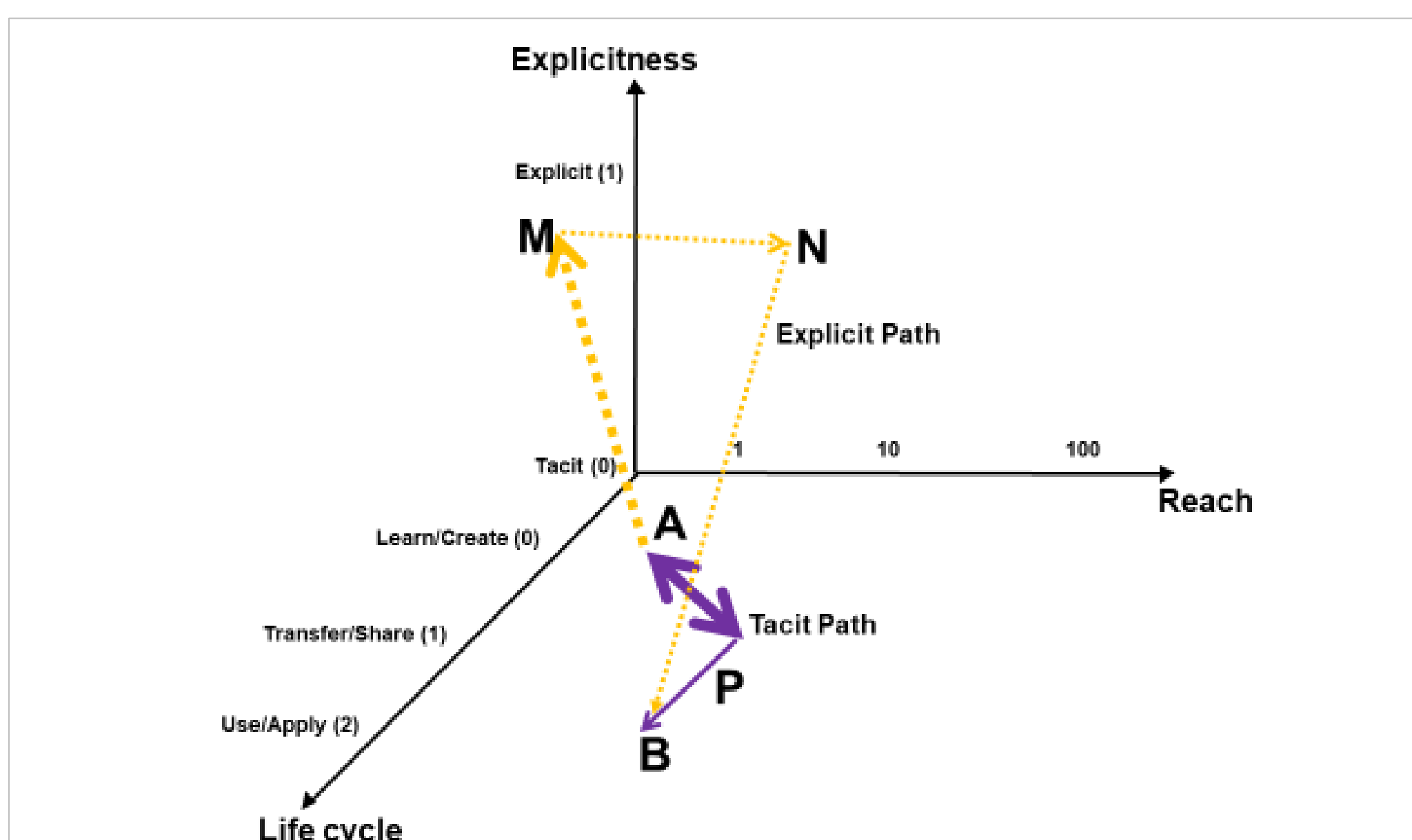
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Background

- SWO Community plays important role
- Knowledge & learning are critical
- People & ships are different
- Hard to predict individual & team competency
- Accidents can result



McCain Collision



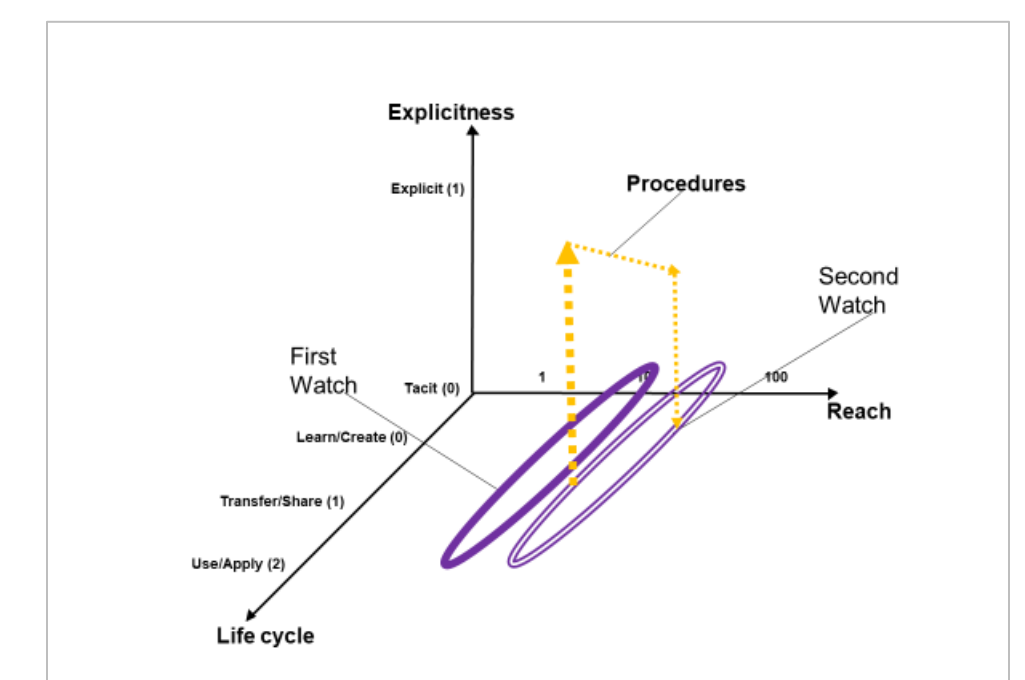
Knowledge Visualization

Knowledge Visualization

- Leverage state of the art
- Knowledge visualization & measurement
- Delineate dynamic knowledge flows
- Quantify knowledge energy & power losses
- Elucidate novel, important insights

Key Findings and Results

- Insufficient to measure & track *individual* SWO knowledge
- Knowledge of *teams* (e.g., watchstanders on Bridge) is critical
- Aviation & Submariner Communities provide insights & examples
- Mariner Log Book & tracking systems
- "Remove before Flight" notes & records
- NMETLs & PQS items to track training & accomplishments
- Watch Bill scoring



McCain Application

Recommendations for Future Research

- Adapt suitable tools & techniques from Aviation
- Integrate with existing SWO systems
- Investigate Mariner Log Book usage
- Develop SWO proficiency KM architecture
- Focus on CRUDES O3 Department Head selectees
- Populate & track information



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