



Planning for Recall of Maintenance Manpower

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- **Objective**
 - To determine methodology for establishing an optimal recall period for military technician reservists
- **Main Research Idea**
 - For the U.S., military technicians (MT) hold dual-status roles as civilian employees and reservists.
 - Conflict arises between the primary military unit and reserve military unit when the MT is due to reservist recall
 - Primary Unit - Longer recall → decrease in the period of MT availability → increase in loss faced by unit
 - Reserve Unit – Longer recall → increase in the period of MT availability → decrease in loss faced by unit
 - Question: How to reduce the overall loss incurred by both units due to the transition of the MT between the respective roles?
- **Research results**
 - Loss functions developed for both primary and reserve units.
 - Summation of loss functions provides an overall loss function, where the point of minimum loss corresponds to optimal point for reserve recall.
- **Benefits/Potential applications of the research**
 - Provides a methodology to reconcile different unit requirements and normalize to a common baseline for comparison
 - Potential application for other scenarios where there is a need to manage concurrent demand for the same shared resource.