# To Track or Not to Track?

## Assessing the Feasibility of Sorting Student Naval Aviators into Predicted Performance -Based Training Tracks

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# Background

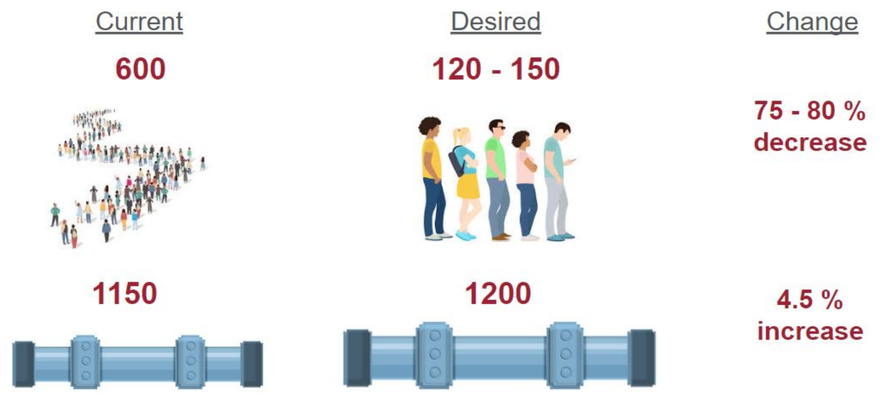
NIFE Pool > NIFE Academics > NIFE Flights > Primary Pool > Primary Academics > Primary Flights

**The Naval Air Training pipeline is a process.**

# Problem:

In order to maintain a combat ready force, the Naval Air Training Command (NATRACOM) must decrease waiting pool sizes and increase annual throughput rate of qualified Navy pilots, without additional resources.

Previous work suggesting a model to sort Student Naval Aviators into Predicted Performance -Based tracks was not substantiated by an accuracy metric.




# Objective

**Make a recommendation to the Chief of Naval Air Training (CNATRA) on whether or not SNAs can be sorted into predicted performance -based tracks.**

# Important Features

**Intrinsics**

**Individual Athletics**

**Previous Fight Experience**

**NIFE Academics**

**NIFE Flights**

**Primary Academics**

**Weather**

| Model | Included Features | $OSR^2$ /Accuracy |
|---|---|---|
| **PRITTT Numeric** | all | **0.0766** |
| **PRITTT Numeric (limited)** | Primary Rank<br>NIFE Academic NSS<br>Primary Academic NSS<br>Weather | **0.0436** |
| **PRITTTENT Numeric** | all | **0.3629** |
| **PRITTTENT Numeric (limited)** | NIFE Rank<br>NIFE Academic NSS<br>NIFE Time to Train<br>NIFE Time to Train Entitled<br>Weather | **0.9905** |
| **PRIHRSFLWN Numeric** | all | **0.0805** |
| **PRIHRSFLWN Numeric (limited)** | Primary Rank<br>NIFE Academic NSS<br>NIFE Time to Train Entitled<br>Primary Academic NSS<br>Weather | **0.9507** |
| **PRITTT Categorical** | all | **0.4966** |
| **PRITTT Categorical (limited)** | Primary Rank<br>NIFE Rank<br>Primary Squadron<br>Weather | **0.4678** |

# CONCLUSION

Track assignment may have potential, but the current model can't sort SNAs accurately enough to be a basis for simulation.

# Future Work

incorporate Prior Flight Experience data for a model that is more…

**COMPREHENSIVE & ACCURATE**