# LINQUEST

# CSOM
## CENTER SCHEDULING OPTIMIZATION MODULE

## WHAT IS CSOM?

CSOM is an enterprise scheduling solution for Edwards Air Force Base that builds automated and optimal weekly flight schedules in a fraction of the time required by previous processes.

It optimally schedules precisely configured aircraft, airspace (flight ranges and air refueling tracks), test control rooms, and the frequency spectrum to maximize the utilization of limited and expensive flight test resources.

To optimally solve the scheduling problem, CSOM uses an Integer Program solution with a hierarchical objective function to simultaneously consider the entire solution space of the problem, improving the schedule's robustness and quality while drastically reducing the time it takes to produce a schedule.

CSOM's proven methodology can be customized for many other types of large and labor-intensive scheduling problems.

## FEATURES

• The methodology is customizable to many other complex batch-scheduling problems

• Considers detailed resource requests of all stakeholders to ensure the resultant schedule meets user requirements

• Leadership-defined priorities are easily translated into the module to ensure operational schedules support the strategic objectives of the organization

• Parameterized architecture enables algorithm adjustments without "breaking into the code"; and permits seamless business rule changes

## BENEFITS

• Takes minutes instead of days to build a complex schedule

• Gives time back to schedulers, more focus on effective execution of the schedule

• Built-in transparency ensures trusted solutions

• Creates a robust schedule— able to overcome unexpected changes

• Unmatched ability to quantify the cost/benefit of resource procurement and allocation decisions through sensitivity analysis: inexpensively plays the "what-if" game