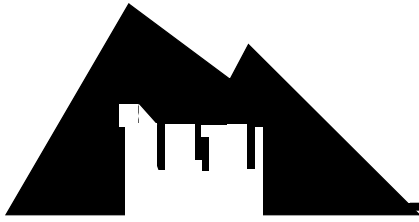


# *The RAL Seminar Series*



**NCAR**

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## **Distributed Work in the National Airspace System (NAS): The Use of Airspace Flow Programs to Manage Large-Scale Weather Events**

by

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*Monday, January 14, 2008  
Foothills Lab Building 2, Room 1001  
9:00 a.m.*

The air traffic management system in the United States is an example of a distributed problem-solving system. It has elements of both cooperative and competitive problem-solving. It includes complex organizations such as Flight Operations Centers, the FAA Air Traffic Control Systems Command Center, and traffic management units at enroute Centers, TRACONs and Towers that focus on daily strategic planning, as well as individuals concerned more with immediate tactical decisions (such as air traffic controllers and pilots).

Whenever a new traffic management strategy is introduced, it needs to be considered in terms of its impact on the behaviors of individuals and organizations in this distributed system. Over the past two years, such a new strategy has been introduced for traffic flow management to deal with convective weather. This strategy, involving the use of Airspace Flow Programs (AFPs), has three goals:

- More precisely manage traffic so that only those aircraft that are truly passing through the constrained airspace will be delayed.
- Provide the NAS users with the ability to determine which of their aircraft will be allowed to make use of the available capacity.
- Allow the NAS users to route out of the constraint, thus avoiding any departure delays for those flights that no longer are filed to pass through the constrained airspace

This talk will focus on a case study dealing with the use of AFPs, looking at the impact that this type of traffic management initiative has on the behaviors of dispatchers and traffic managers in this distributed work system, and on overall system performance.