Monday 5/1 - Meeting with General Manager of Air Traffic Management at Delta Air Lines and Former OCC Digital Technology Manager at Delta Air Lines

**Agenda**

- **Introduction to Project**
  - **Goal:** Understand how airlines fit into TFMS applications
    - If we were to design an airline view, what would we include?
  - Asking what TFMS Applications are used in their workflow
    - What different TFMS applications/interfaces do you work with related to AFPs?
    - How does the FAA send you EDCT info?
    - What do you like/dislike about how that information is communicated/formatted?
    - What aspects, if any, of TFMS do you have limited/restricted access to that you wish you could access in FMDS?
    - When evaluating an AFP, what helps you determine its impact on DL flights?
- **Communication**
  - Thoughts on voice / chat feature?
    - Show wireframes
  - User permissions (“Behind the glass”) -> How often are you communicating with people who don’t have access to TFMS applications?
  - What applications are you (as an airline) restricted from?
    - Can you view NTML?
  - What are helpful for post-event review?

**Notes**

- What different TFMS applications/interfaces do you work with related to AFPs?
  - Times, and how “we” are moving around in the system
    - Volume that “we” create at airports is managed by the FAA
    - We know in general what capacity they have at these airports
    - When capacity exceeds, they anticipate it will be dealt with in some way
  - FSM: primarily with volume by airspace
    - Application they use the most
    - Air Traffic Coordinator positions, typically the ones who manage airports, they all have this information in front of them
      - Hourly demand (arrival and departure)
      - Can fine-tune for different initiatives (miles-in-trail, TBFM restrictions)
    - What they value about FSM
      - Visualization of the demand at an airport
        - The status of that demand
      - Can see where flights are coming from
  - Route Structure and Requirements to fly certain routes
    - Conveyed through TFMS
  - TSD and FSM Volume Boards
- Used to generate advisories
- How they inform the user community of what their intentions are and what they are planning to do/have already done
- Need to first understand the scheduled saturation of airspace
  - Able to look throughout the day to see what normal saturation would be, where air traffic has their sector volume set, and where they would exceed the sector volume
  - The reason behind why a sector was saturated
    - Seasonal volume, daily volume to a large airport and the pref-routes that are being used, etc.
- Tool to understand the route structure set in place
- Airlines cause use TSD to see the saturated sectors have been de-saturated
- Want to be able to understand an airspace issue (rocket launch, weather, etc.)
- **Need to understand cause and effect from an airline standpoint, and understanding the FAA’s restrictions are key**
  - This would address the experience issue, where more experienced users have more knowledge compared to new users
    - FSM connected to SWIM
      - Would like to see volume greater than 24 hours
        - 3-4 days (being able to see at least three days out so on Friday you can make a plan for the weekend)
          - Limitation is that this would capture scheduled flights
          - On Thursdays, the next seven days of data are loaded from OAG (data platform for travel industry)
    - Need more than a 12-hour window
      - TSD alerts users 6 to 8 hours in advance so airline can be ahead of Command Center when discussing playbook routes in the morning
    - Not being able to look in the future (to understand the saturation for them to then drop more volume) hinders the airlines workflow
    - Understanding cause and effect earlier on in the current workflow of TSD interactions between the FAA and airlines
- How does the FAA send you EDCT info?
  - Use commercial product to view information in relation to other flights
    - Can use FAA tool to view the flight list in FSM
    - Pay the commercial carrier to place information in a more readable format
    - May be out of scope (for airlines)
    - Automated algorithms for move-ups
      - They would know the “A Slot”
        - Are they meeting the “A Slot”? Is the AFP falling behind or is it meeting its slot time
  - What do you like/dislike about how that information is communicated/formatted?
    - May be out of scope (for airlines)
- Visualization of the effectiveness of an AFP could be worthwhile
  - Something that respects the more real-time aspects of the information
- Thoughts on voice / chat feature
  - Could be complicated because everyone is used to communicating via telephone
  - Use active Microsoft Teams currently (similar to our current decision)
  - Usually, individuals in these chats are so busy that they will either lose focus or have difficulty responding
  - Clearly there is a need, but the actual feasibility of this tool is difficult to finalize
  - Maybe creating a “To-Do List” or a Prioritization list for users
  - Chat could be centered around flight number or around sectors if it is a broad topic
  - Would be down to talk with professors from SI 429 for their opinion on what the best approach to this feature could be
- What would you revise/change about our mockups
  - More heavy on the TSD side