As flights get cheaper and more easily available to more citizens, flying as a means of travel has become one of the easiest ways to get from one place to another. Not only can an airport be a place to wait for someone's arrival or departure, but it can become a “city center” accommodating a majority of visitors for a city. With a large retail shopping area, an upper-class restaurant, lounge area for business meetings and relaxation, a conference room, and a large cafe space - all with abundant natural lighting so that one can see the sky and planes take off, the airport can be a destination and not only a place to walk through. A beautiful airport will also be a glamorous entrance to a new city.

For future expansion, this simple 160' x 240' airport can be connected together sideways to accommodate more terminals, and in stages, a high-rise commercial building, or even a railroad, can be added.

To allow such abundance of light, the facade is double-skinned, allowing for better sound control, natural ventilation, walkways in each spire to allow for easier cleaning and maintenance of the glass, and glare control.

**Conceptual Design**

To maximize natural daylighting and to create a sense of “uninhibited openness” to the outdoors, a four-sided glass facade needed to be designed, as well as an open plan spanning 240 feet.

**Structure**

To minimize natural daylighting and to create a sense of “uninhibited openness” to the outdoors, a four-sided glass facade needed to be designed, as well as an open plan spanning 240 feet.

The task: To design and proportion overall structural framework, individual members, and their connections to fail in a particular “safe” manner:
- Consider all failure modes (limit-states)
- Favor failure modes which allow members to slowly show distress (ductile yielding) over sudden failure / collapse (brittle fracture)

Also, while calculating for:
- Deflection, Acceleration, Vibration & Cracking.
- Revision of members according to:
  - Strength, Serviceability, Economy & Coordination with other design disciplines.

**Design Criteria Load:**
- Dead Load,
- Live Load,
- Snow Load,
- Wind Load,
- Seismic Load,
- Earth Pressure,
- Others.

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**Hana Ishikawa – 4th yr Architecture**

**As flights get cheaper and more easily available to more citizens, flying as a means of travel has become one of the easiest ways to get from one place to another. Not only can an airport be a place to wait for someone's arrival or departure, but it can become a "city center" accommodating a majority of visitors for a city. With a large retail shopping area, an upper-class restaurant, lounge area for business meetings and relaxation, a conference room, and a large cafe space – all with abundant natural lighting so that one can see the sky and planes take off, the airport can be a destination and not only a place to walk through. A beautiful airport will also be a glamorous entrance to a new city.**

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**Rev. of members according to:***
- Strength, Serviceability, Economy & Coordination with other design disciplines.

**Raquib Pramanik - Team Leader - Senior Structural Engineer**

**Shopping Arcade (Retail)**

- "Streets" open to above
- "Stores" enclosed

**Upper Floor Café**

- View of the entire terminal
- Open to above

**Upper Floor Cafe**

- View of the entire terminal
- Open to above

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**Restaurant**

**Upper-scale Special Occasions**

- Meeting room
- Lounge...