The following is a detailed review of the critical aircraft designation appropriate for the 2003 Master Plan Update. It is assumed by the analysis that the ultimate purpose of defining a critical aircraft is to provide an upper limit guide to long-range planning of selected airport facilities. These facilities could include, but are not limited to the following:

- Runway length/width
- Taxiway widths and separations
- Aircraft parking locations and taxi lane separations
- Runway approach systems
- Safety area dimensions
- Runway protection zone requirements
- Blast pad requirements
- Approach minimums
- Etc.

While a high operational level per single type of aircraft (critical aircraft) may be useful and appropriate for a final justification of a given facility, a Master Plan is by definition a generalization and thereby less definitive. The normal critical aircraft classification incorporates a standard of 500 aircraft operations. Review of the critical aircraft for the Rock Hill/York County Airport (Bryant Field) will aim for the determination of the single most active type of aircraft but will not ignore lesser active but higher restrictive aircraft. To omit review of numerous types of jet aircraft that collectively generate significant operations would not serve the purpose of safety.

SkyTech Registration Forms

The initial method of reviewing critical aircraft operations is to tabulate the transient forms filled out by aircraft visitors to the FBO (SkyTech). The forms covered the time period from May 1, 2002 to September 12, 2002 (approximately four months). From these forms, a list of turbofan aircraft visits was tabulated and is illustrated on Table A – SkyTech Turbofan Summary.

Table A
SkyTech Turbofan Summary
Rock Hill/York County Airport (Bryant Field)

Type of Aircraft	Number of Visits	Type of Aircraft	Number of Visits
Citation Excel	5	Beechjet	2
Citation 5	2	Beechjet 400	2
Citation 560	2	Beechjet 400A	2
Citation 650	1	Executive Jet	1
Falcon 2000	1	Hawker 800	1
Falcon	1	Hawker 125	1
Falcon 50	1	Jet	3
Lear 35	1	Lear 31A	1
Lear 25	2	Lear Jet	1
Lear 55	1		
		Total	**31**

It needs to be understood that this listing is only a partial tabulation given that only visitors requiring FBO services are listed. Also, the survey time period is during an economic recession.

The names of companies, as well as origin or destination points, are omitted due to proprietary legalities.

SkyTech Interview

The second method of critical aircraft analysis is a review with SkyTech owners other aircraft activity and commitments for future aircraft basing.

A very active aircraft at the Rock Hill/York County Airport (Bryant Field) is the Pilatus PC-12 single-engine turboprop aircraft. The SkyTech maintenance facility is the designated maintenance facility for the owners of ten Pilatus aircraft. In addition, SkyTech has a **Demonstrator Pilatus** (home based at the Airport) that averages approximately three flights a week. A second demonstrator is on order.

	Flights	Operations
Single Demonstrator	156	312
Pilatus Maintenance	100 to 150	250
Total		**562+**

Due to current property tax laws, a single aircraft owner of a Pilatus, Citation 3, and two KingAirs has moved to North Carolina. The owner has committed to SkyTech to return within five years with tax law adjustments. The tax law adjustment is currently being considered by the South Carolina State Legislature with a county option approach.

Conclusion

With the analysis given above, it is the opinion that the Airport would be best served with an existing critical aircraft designation of Pilatus PC-12/Citation Excel. Both of these aircraft are B-II design classifications and, in tandem, define the facilities needed. Phase I should continue with this classification with a change in Phase II to a C-II classification. The proposed critical aircraft for Phase II would be a Gulfstream 200.