

The Future of Light Commercial and General Aviation: Regional

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Since 1978, a lot of changes have taken place in our sector of the industry. Our group looked at four areas for the next five years through the 1992: 1) the technological advances, 2) economic and financial issues, 3) the operational concerns, and 4) the market forces. Members of our panel had solid backgrounds in areas from engineering and avionics to market planning.

As a result of the presentations that were made, and the discussions that followed, we found those four subjects extremely interlinked. You could not talk about one without something rolling off into another.

With regard to technological advances, currently our marketplace is in a re-equipment phase. A lot of new aircraft are coming on the market. Worldwide there are approximately a thousand aircraft on order or option to be delivered in the next five to six years. Improvements to those programs, with two exceptions, will be derivatives and minor things like stretch versions and improvements in operating economics. Embraer is developing a 19-seater of an unusual configuration, and Dornier has started a new 30-passenger aircraft. Development is limited because 1) most everybody made the decision six to seven years ago to develop some new airplanes; and 2) we are not far enough down the line in technological development to make a significant impact in the DOC reductions required for the additional capital expenditures. Our panel was unanimous that any technology incorporated into the regionals must have a real payback for the operator.

With respect to engine programs, the gestation period is about seven years from design to incorporation into operation. We expect to see certain improvements in SFC's and derivatives of extra additional horsepower, but no significant changes in the design of the turbine engines that are the standard in this turbo-prop market.

Regarding economic and financial issues, all you have to do is talk to an operator and his first question will be: "How much am I going to have to pay for this new airplane?" Most of the operators are not buying aircraft. They are leasing them. This is something new for the commuters. Four years ago, the typical lease term was 10 to 12 years. That was the most that a commercial bank would finance. Now, 14 to 16 is the norm, and recently there has been some serious talk about taking that term to 20 years. This follows the pattern of the large commercial transports.

Also, because this is such a new market, most of the banks do not have a solid feel for what the residual value of this aircraft or any of the new generation aircraft will be in 20 years or 15 years. We feel that the residual value will climb from the typical 20 to 25 percent to 35 to 40 percent. Many deals are being made in that range. The financial markets are beginning to accept the regional aircraft for what they are, and that is long term productive asset in their portfolio.

Operational concerns. Most of these concerns are oriented around regulatory issues. We are starting to see more limited access to airports, and

the commuters will probably bear the brunt of that. At Boston, there is a Massport proposal to take most of the commuter traffic out of Boston Logan and move it elsewhere. The West Coast is the same way with noise and traffic restrictions and talk of peak time access charges. That type of change particularly hits the commuters where those charges are spread over only 19 to 50 seats instead of 175 or more in the large transports. While the goal is to improve safety, the result of additional avionics requirements will probably be to force the smaller operators out of business -- what we call our "fourth tier" operators. If flight data recorders are required on aircraft of 19 or fewer seats the cost for the data recorder alone would be on the order of \$150,000, not including installation and down-time. When you think that many of our operators consider \$350,000 to \$500,000 profit a good quarter, and they have fleets of 40 airplanes, that expense can take away a lot of profit in stockholders' return.

With regard to the market forces, ownership and effective control of most of the regionals is now dominated by the majors. Ninety-five percent of the regional passengers tickets are written through a major. They have done this by stepping up their equity infusion, either through stock purchases or loans. They have even leased the equipment that they are going to use; and they have done this with the ability to avoid liability if the carrier should fail or be sued. This will continue to expand. Texas Air, American, and others, will all end up purchasing their own commuters. It is a way to protect the traffic that they need at their hubs.

Once a commuter has come in to the major airlines' fold, its identity is lost and it no longer needs marketing people, a lot of management people -- especially the yield management people and scheduling people. All that is done by the major. However, the commuter gets access to the all-important ground-side position in the airport. No commuter has survived cutting the strings from its major and that will continue to be the trend. They are an operating arm of the majors, and they want to be perceived as that quality of carrier.

The result will be a small number of commuters. Currently, of the top 50 U.S. commuters only three are non-aligned, and they will probably fall by the wayside. The development of the "fourth-tiers" of commuters will not be significant. They will be small point-to-point carriers in areas in the Midwest and West, that serve the smaller cities with inadequate traffic for the jets and the large turbo-props. With 19 to 30-seat aircraft they can make a living, however.

Many small markets will lose their subsidized service. As profit rationale takes over, small cities in Kansas, Colorado, Nebraska, and similar states, will lose their service. There just is not enough traffic to support the capital investment in an aircraft to fly between those points.

Despite the gloom, traffic for major regional carriers continues to grow at eight to nine percent, and we see that continuing. The growth figures will probably be higher this year, but tapering and paralleling the growth of the majors as hub saturation is reached. There are a lot of dollars being pumped into that segment right now by the operators. Typical costs of a 19-passenger airplane is \$3.5 million. 30-passenger to 40-passenger planes are in the \$7 million range. The growing influence of these operations by the major airlines

is the significant marketing advantage from capturing the customer as soon as he starts his trip in order to carry him on your airline for the longer trip. One West Coast airline has said that their feed contributes \$20 million to the bottom line annually. That is important and cannot be ignored; but there is still a lot of turmoil left in this market. Some of the smaller operators will fall out and older equipment will be phased out. We expect that the next five years will prove to be as interesting as the last five years.

### Discussion

Mr. Wood (Flight Safety Foundation) : I understood you say \$100,000 for a flight data recorder without installation. That sounds awfully high. Is that an accurate figure?

Mr. Dibble: The people at the Regional Airline Association and the operators say that none of these small airplanes have the wiring or the sensor systems installed for the flight data recorder so you have major down-time in developing a harness to take off engine parameters and things like that. A certain amount of data can be gotten off of the gauges -- the sensors -- but the rest of the system is not in place; and they do not have things like digital data busses to go into. It becomes a very costly thing in terms of man hours to require those aircraft and develop the system.

Mr. Wood: So you are counting the labor and everything in that figure?

Mr. Dibble: I think so.

Mr. Wood: I thought you were talking about an off-the-shelf recorder which might be \$10,000 to \$12,000.

Mr. Dibble: That is right, but the installation to get that in the airplane could break several of the carriers.

Mr. Wood: Has there been any consideration for a modified flight data recorder with just the basic parameters.

Mr. Dibble: One of the best proposals that I have heard of is a sophisticated cockpit voice recorder that, with altitude callouts from ground proximity warning, you could take feed off of that and pick it up in the cockpit voice recorder.

Mr. John Griffith (Boeing): How many commuter airlines do you foresee being in existence at the end of this five year horizon. Also, what kind of fleet size are we talking about on average just in the lower 48 States considering the tie-ins with the majors.

Mr. Dibble: Each major (depending on which forecast we have heard today as to how many majors there will be left) will have an operating arm. You will not see individual carriers. You will not see a ComAir, Business Express, or Brockway; they will be operating arms like the Delta Connection, so they lose their identity completely. Currently, there are about 1,800 aircraft in the commuter fleet. That includes a lot of piston engine aircraft that have nine seats. All of those will probably be gone over a period of time, except for the "fourth-tier" carriers.