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COMMENT

POSITIVE THINKING

D

efence contractors worldwide are fac-

ing the task of converting at least
some of their research, development
and production capacity to civil pro-
jects. The governments which built them up seem reluctant to assist in the conversion

process by identifying and supporting civil technology initiatives.
In case there is any lack of ideas among governments as to which avenues to promote, Flight International would like to take this opportunity to outline just a few of the more promising commercial concepts which have yet to leave the drawing board.

North America, where inconvenient airport loca-tions and frustrating flight delays often conspire to make air travel unattractive and uncompeti-tive with surface transportation. To fight back, airlines must reduce the passenger's door-to-door travel time.

The best way is to move the airport closer to the customer and the best way to do that is to establish community vertiports serviced by civil tilt-rotors. What is needed, rather than yet another regional turboprop or regional jet to add to airspace and airport congestion, is a quiet, cost-competitive tilt-rotor that the public will like and that most airlines will want.

If the world air-travel

market develops as pre-
dicted, airlines will have
to increase capacity to
cope, sooner or later.
Today, the only answer
to increased capacity is
more aircraft; tomorrow,
there is likely to be the
option of bigger aircraft.
There is another answer

and that is fewer,
smaller aircraft flying
much faster.

Industry seems intent
on developing subsonic
aircraft capable of carry-
ing 600, and one day
1,000, passengers. This
will serve to shift the

congestion problem
firmly from the air,
where fewer aircraft will

be needed, to the ground where more passengers will arrive en masse. The only prospect for the passenger seems to be a long flight followed by. a long wait at immigration.

The high-speed civil transport offers the potential to be as productive as a future large airliner by flying 300 passengers to their desti-nation in a third of the time it takes a subsonic

600-seater. Oversimplified mathematics suggest a Mach 2-plus airliner could complete three return trips in the time it takes a subsonic transport to complete one — for a total of 1,800 seats available compared to 1,200.
Supersonic airliners would arrive at their destinations more frequently, but disembark no more passengers than the average 747 — easing the peak strain on airport infrastructure. What is needed is a quiet, fuel-efficient, environmen-tally friendly supersonic transport which can be produced and operated cheaply enough that airlines can avoid charging premium fares.
* * *

High-speed trains pose a serious threat to regional airlines in Europe, and potentially in

Cjovernments seem

reluctant to identify and

support civil technology."

Aviation is all about fly-
ing, but the cost of learn-
ing to fly will increase
greatly when schools
have to replace their
1950s-designed, largely
1960s-built, training air-
craft with 1980s-de-

signed, 1990s-built aer-
oplanes. There is a des-
perate need for a training
aircraft designed in the
1990s that sells for

1960s prices and will fly
into the 2000s.

Despite near-critical
demand for new aircraft

in the USA, certification
costs and product-liabil-
ity laws in that country
are keeping new designs
off the market. That

might change in 1992, if
new airworthiness rules emerge and liability legislation is reformed. What is needed is an aircraft that is cheap to buy and safe to fly, and more economical to operate and easier to maintain than today's trainers.
* * •

Public support for space could be generated more easily, and paid back much earlier, if automatic orbiting factories were producing drugs and electronics for everyday use, Earth-observation platforms were policing the environ-ment and pocket telephones were linked by satellite. What is needed is a trucking service using reliable rockets to boost customer pay-loads, "big or small, at affordable prices.
• * *

This is not just an idle exercise. There is a common theme running through these projects and it is that government support — financial or political, direct or indirect — could make it a great deal easier for industry to pursue any one them. Judicious use of tax-payers' money today could help ensure that there are wage-earners — and tax-payers — tomorrow. D

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