

THE INSTITUTE FOR SAFETY IN TRANSPORTATION

P.O. Box 63 • Franklin Square • NY 11010 • (516) 485-0050

Dr. Edmund J. Cantilli, PE, CSP, AICP
Executive Director

14 August 1986

James E. Burnett, Chairman
National Transportation Safety Board
800 Independence Avenue SW
Washington, DC 20594

Dear Mr. Burnett:

It was gratifying to read in yesterday's NY Times of your dedication to safety, and I would like to be one of your strongest supporters. But you have turned a deaf ear to the real solution to the problem of air safety: the Burnelli Lifting Body airplane.

I believe you have been informed of the existence of the Burnelli Lifting-Body design and its great safety advantages for passengers and crews of commercial airlines. As I recall, your response was that NTSB is not in a position to recommend airplane designs. Is this really your position? The NTSB did recommend design changes to railroad tank cars, whether during your period in office or not I do not recall. Be that as it may, you cannot pass the buck on this question by stating that it is FAA's responsibility, or (as FAA puts it) NASA's responsibility (NASA in closing the circle says it's FAA's responsibility).

I think it's *your* hot potato, Mr. Burnett. The advantages of this design for saving lives are so clear, so numerous, and so far-reaching, that for a person in your position to ignore these

facts is unconscionable. In the attached copy of a clipping from the NEW YORK WORLD-TELEGRAM of, I believe, 1950 or thereabouts, Clyde Pangborn--you may not remember him, but I do--states, as underlined, that "sixty percent of the victims in recent air crashes would have been saved in a Burnelli-type plane". I think that my estimate, that 85% of the people who have died in commercial air crashes since 1950 would have survived in Burnelli-design aircraft, is conservative. If you investigate this issue, you will find that the arguments for requiring adoption of the Burnelli design immediately are irrefutable.

Mr. Cook's article states that "government officials" gave, as a reason why the Burnelli-type plane was not put into use during World War II, "a mix-up in manufacturing rights"! Can you believe that? That an airplane which General Hap Arnold called necessary to the war effort, was never adopted, in a war in which the fate of the Nation and the Free World were at stake, because of "a mix-up in manufacturing rights"? And if you do believe it, is it still a good reason for its not being used to save the lives of passengers and crewmembers on commercial flights?

I would like to believe you when you say that you will remain outspoken on safety issues; that (speaking of the 1982 Air Florida crash) you "...never wanted to feel I had not done everything I could to prevent that kind of carnage"; that you "...do not worry if I am unpopular". However, if you pass the buck on the Burnelli design for civilian carrier aircraft, I think your sincerity will be open to question. If you don't drag out the skeletons of the Burnelli issue, how can you remain outspoken on safety issues? If you don't demand adoption of this design, how can you accomplish anything toward prevention of air crash

carnage? If you don't worry about being unpopular, why do you sidestep this issue?

This is not a matter of the 'market place'; 'economics'; or 'private sector' responsibility. When someone in a position to improve safety (to the degree that the Burnelli design would improve safety in air crashes), knows how to do it but does not, for whatever motive, that person's protestations of sincerity in his desire to improve safety are open to question. After all, your arguments against the adoption of the Burnelli design cannot have anything to do with the loss of business of the two major domestic aircraft manufacturers; or their costs of re-tooling; or the complaints of the airlines at having to purchase new planes. Your arguments in favor of this design would be on the side of the angels: for human survival; for reducing the risk of flying (and surviving inevitable crashes) to its lowest humanly, reasonably (and economically) possible level; and, thereby, for raising the image of the air transport industry to its highest levels.

What arguments do you have, then, against adoption of the Burnelli configuration? 'Not your responsibility' is a response unworthy of your reputation. Have you looked into this matter? Have your specialists (not FAA's; not NASA's) investigated this airplane, its history and evaluations over the *65 years* of its existence? Let them explain why, when U.S. Senator Bronson M. Cutting was killed, in 1935, in a DC-2, a major shake-up in Federal aviation safety regulation took place; but when a Burnelli plane crashed while flying at 200 mph, also in 1935, and the passenger cabin was intact and the three-man crew unhurt, there was no notice taken. Had such notice been taken then, the course and image of commercial aviation would have changed considerably, especially in terms of the thousands of lives not

lost.

Please do not dismiss this issue out of hand; it will not go away if ignored. As the public learns of the existence of a safe design, the public will demand its adoption. You should be in the forefront of that demand.

I am sending a copy of this letter to the members of Congress from New York State; the members of Congress serving on appropriate committees; appropriate Federal Executive offices; and the major news media organizations.

Sincerely yours,

Edmund J. Cantilli

Planes May Get That New Look

By MAX B. COOK,
Scripts-Howard Aviation Editor.

Higher speeds and new-type power plants for commercial airliners of the future may force revolutionary changes in present-day aircraft designs.

The cylindrical-type present-day fuselage does not offer substantial lift from the body section, it is pointed out. As a result, the wing-loading of today's airliners has increased from 16.3 pounds per square foot in 1932 to 73.8 pounds on the latest type.

Wing-loadings are so high that safe flying becomes a problem, according to David L. Behncke, president of the Air Line Pilots Assn. Mr. Behncke recently charged that "airlines today are looking to Rube Goldberg devices and excessive braking action in an effort to bridge the gap between the inadequacy of our airports and the high-performance characteristics of the planes."

Mr. Behncke pointed out that heavier wing-loaded planes require more space to maneuver.

That Great Britain has been working on a revolutionary—even "fat and sunny"—design for future airliners was revealed last month by Dr. Sydney Goldstein, Chairman of Britain's Aeronautical Research Council. He pointed out that our vaunted streamlined aircraft of today may look just as antiquated a few decades from now as the 1903 Wright plane now appears. He predicted use of thick airfoils and use of boundary-layer suction control for the higher-speed jet types.

Reduced landing speed, with "far-greater cabin-section strength than that provided by the present nonlifting streamlined-body design," has been urged by the Crash Injury Research Division of the National Research Council. This followed a study of recent aircraft crashes.

Clyde Pangborn, famed round-the-world pilot, today pointed to the Burnell lifting-body type of aircraft as a specific development along the lines outlined by Dr. Goldstein. Mr. Pangborn has conducted flight tests over several

years on three types of the Burnell planes.

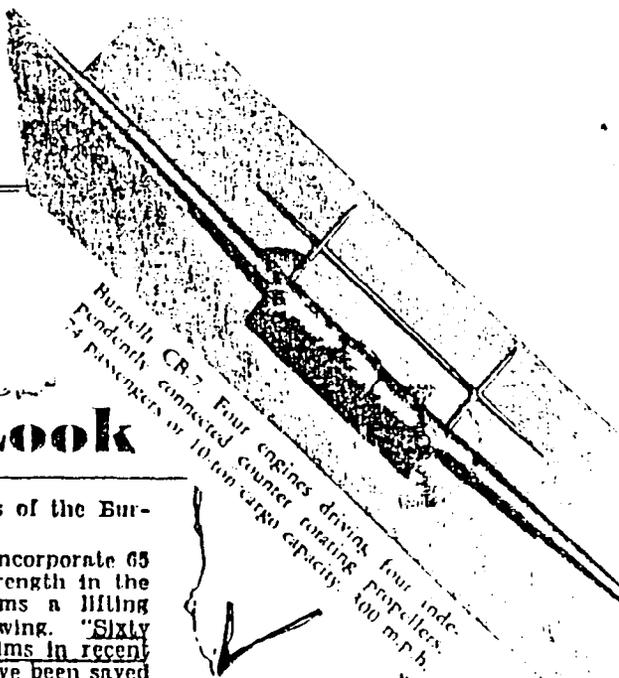
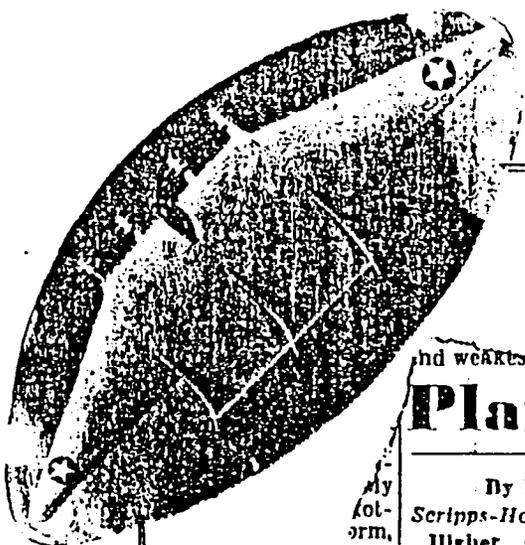
They are said to incorporate 65 per cent of their strength in the fuselage, which forms a lifting center-part of the wing. "Sixty per cent of the victims in recent air crashes would have been saved in a Burnell-type plane," said Mr. Pangborn.

More than 25 years ago Vincent L. Burnell, Texas airplane designer, devised a modified flying wing which gets "approximately 40 per cent of its lift from the fuselage center section." Mr. Pangborn says it weighs less when empty than present-day types; carries more payload; flies faster than comparable planes; can be crash-landed without injury to passengers in most cases and without danger of fire, as the engines are not near fuel tanks. He adds that it has lower wing-loading and that shorter takeoff and landing distances are required.

A mixup in manufacturing rights is given by government officials as one reason why the Burnell-type plane was not put into use during the war. Many top-ranking Air Force officials have indorsed its type of design.



Max B. Cook.



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National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

September 16, 1986

Dr. Edmund J. Cantilli
Executive Director
The Institute for Safety in Transportation
P.O. Box 63
Franklin Square, New York 11010

Dear Dr. Cantilli:

Thank you for your letter of August 14, 1986, in which you expressed your belief that the Burnelli Lifting Body airplane would markedly improve the survival of passengers and crews during a crash. The National Transportation Safety Board appreciates and shares your concerns about the sometimes obvious disparities that exist in the crashworthiness of different airplane designs.

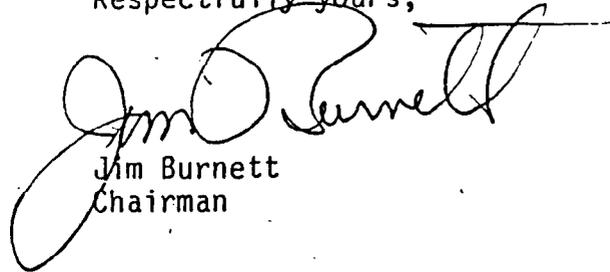
The Burnelli design appears quite imaginative and worthy of further exploration in terms of its crashworthiness and occupant survival. As you may know, the Safety Board has given considerable attention over the last 20 years to the issues of crashworthiness and occupant survival and it has issued numerous safety recommendations to the Federal Aviation Administration (FAA) to alleviate these pressing safety issues. These recommendations have resulted in more crashworthy fuel systems, improved crew and passenger seats, reduced flammability and toxicity of cabin materials, and improved emergency evacuation systems. We believe that the corrective actions that have been taken and those that will be implemented in the near future by the FAA as a result of our accident investigations, are instrumental in reducing or even eliminating needless injuries and deaths.

I can assure you that the Safety Board and I, as its Chairman, remain dedicated to improving the safety of air transportation and the associated survivability of passengers and crewmembers.

While the Safety Board respects your views on crashworthiness, the Board's congressional mandate does not provide it with the legislative authority nor does the Board have the staff to conduct an evaluation of the Burnelli Lifting Body with respect to its crashworthiness features or to evaluate or endorse specific aircraft design concepts.

The Safety Board sincerely appreciates your continued interest in and dedication to this unique airplane design. Thank you for taking the time to keep us apprised of your views.

Respectfully yours,

A handwritten signature in black ink, appearing to read "Jim Burnett", written over a horizontal line. The signature is fluid and cursive, with a large loop at the end.

Jim Burnett
Chairman

NTSB warns airlines on media briefings

THE US NATIONAL Transportation Safety Board (NTSB) is to issue carriers with new rules for post-accident briefings to the media, after a strongly worded exchange with American Airlines over the handling of the recent Little Rock crash.

Following a meeting with the Air Transportation Association (ATA), the NTSB will shortly release formal new directives for dealing with the press after a crash. "We're giving airlines written guidelines on what they should and should not talk about," says Jamie Finch, NTSB director of government, family and public affairs.

Current NTSB practices have

been criticised for being too "arbitrary" and out of touch with the "realities of 24h media coverage", says an airline official. The NTSB in turn has taken issue with airlines it claims are releasing information directly relating to a crash investigation. There is the veiled warning that dissenters could be excluded from involvement in investigations.

Matters came to a head in June when NTSB chairman Jim Hill rebuked American chairman Don Carty, expressing "profound disappointment" with the carrier's briefing in the immediate wake of the fatal MD-82 crash landing at Little Rock. A copy of the letter and subsequent correspondence has been

obtained by *Flight International*.

Hall accuses American executive vice-president Robert Baker of giving a "discourse on investigative matters", during which he made "supposition about the weather, the operation of navigation equipment, the events surrounding the last few seconds of the flight, the wreckage path, the value of cockpit and tower recordings...and who will be interviewed".

Carty says he "was utterly dismayed" at the letter and defends Baker's actions. He argues that the board cannot be allowed to put carriers in the position of "being evasive, unwilling to disclose facts...or less than 100% candid". □

THE BURNELLI COMPANY, INC.

2506 Ponce De Leon Boulevard, Coral Gables, Florida 33134
Tel: (305) 448-0574 & 448-6227 Fax: (305) 448-8589

September 13, 1999

Mr. James Hall
Chairman
National Transportation Safety Board
800 Independence Avenue, SW
Washington DC 20594

Dear Mr. Hall,

We noticed with interest your comment in the *U.S.A. Today* (August 25, 99) article that the media process "can outstrip common sense". Surely, it can be said that the process for NTSB fact finding in the cause for most air crash fatalities "can outstrip common sense".

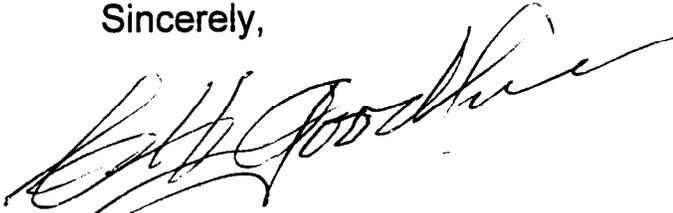
Why has the NTSB failed to recognize that the cause of most air crash fatalities is due to the fundamental flaws which are inherent in conventional airliners ? What could be more stupid in airliner design than the irresponsible practice of hanging engines and landing gear onto fuel tank supporting structure in combination with excessively high takeoff and landing speeds on overstressed tires ? These flaws have never existed in the Burnelli Lifting Body design. The NTSB has refused to recognize this fact publicly, and this negligence is responsible for most of the air crash deaths for decades. I might add that, in 1980, the eminent Professor Edmund Cantilli of New York Polytechnic advised all government agencies and the industry that "the use of Burnelli airliners would reduce air crash fatalities by 85%".

I am enclosing herewith a copy of an article which I wrote at the request of the International Airline Passengers Association over two years ago. It was accepted for publication in their "next" First Class magazine, but it never appeared. The relative correspondence is attached. I am also sending you the Burnelli video, "BURNELLI: The Greatest Story in Aviation History". I hope you will share the article and the video with your colleagues.

Please send us your comments on the above.

Thank you and best wishes.

Sincerely,

A handwritten signature in black ink, appearing to read "Chalmers H. Goodlin". The signature is fluid and cursive, with the first name being the most prominent.

Chalmers H. Goodlin
Chairman & CEO

Enclosures:

USA Today - August 25, 99
"Cash Probe Coverage Questioned"

The New York Times International - September 2, 99
"Death Toll in jet Crash..."

US Army Air Corps Test results
Burnelli Fighter Bomber X-BAB-3
September 19, 39

"Airline Safety is in a Deep Rut"
By C.H. Goodlin - June 3, 97

Eight misc. pages from the
www.aircrash.org web site

"Most Aircraft Deaths Unnecessary"
By Prof. E.J. Cantilli - 1983

Death Toll in Jet Crash Put at 64, Argentina's Worst Air Disaster

BUENOS AIRES, Sept. 1 (AP) — Investigators today put the death toll at 64 in the crash of a Boeing 737 belonging to the Argentine airline LAPA on Tuesday, and continued to pull bodies from the wreckage.

The jetliner lifted only a few feet off the ground late Tuesday before roaring through an airport fence, skimming across a busy roadway and striking cars and heavy machinery, finally stopping beside a golf course.

"It took out everything in its path before stopping and the plane broke in half," said Julio Arévalos, a businessman who jumped from the burning wreckage. "The flames were coming from the front of the plane and there was smoke everywhere."

At least 64 of the 100 people on the plane were killed, a Government spokeswoman, Olga Riugord, said. The Buenos Aires-based carrier, Líneas Aéreas Privadas Argentinas, said 95 passengers and 5 crew members were aboard.

The crash, near Jorge Newbery Airport in downtown Buenos Aires, was Argentina's worst aviation disaster.

Workers in white gloves zipped bodies into plastic bags today as investigators scoured the rubble. A crane lifted up what appeared to be an engine and later removed a section of fuselage from near two sandtraps.

A LAPA spokesman, Ricardo Wilson, said the plane took off at 8:55

***An airliner rises only
a few feet before
crashing.***

P.M. and lost contact with the tower a minute into its scheduled flight to Córdoba, 475 miles northwest.

Neither he nor investigators discussed a possible cause. A team of Boeing investigators arrived in Argentina today to assist. The plane was delivered to LAPA in April 1970 and had logged more than 67,000 flight hours.

One of the plane's two black boxes has been found, according to news reports. There was no immediate word on the fate of the pilot or the copilot.

At least 10 survivors had only minor injuries and were released from hospitals, doctors said. Others were critically injured.

"Many had severe burns over much of their bodies," said Dr. Julio Comando of the Juan A. Fernández Hospital, where most survivors were taken.

The region's last major air disaster killed 74 people when an Argentine DC-9 operated by Austral airlines crashed Oct. 10, 1997, in western Uruguay. The plane was flying from the northeast Argentine city of Posadas to Buenos Aires.

Crash probe coverage questioned

Air safety official: Avoid speculation

By Alan Levin
USA TODAY

BOSTON — Twenty-four-hour news channels and the vast power of the Internet hinder commercial jet crash investigations and needlessly cause pain for family and friends of disaster victims, the nation's top air safety official said Tuesday.

The latest media technology, which has dramatically changed the way crashes are covered, requires information so quickly that the process "can outstrip common sense," National Transportation Safety Board Chairman James Hall said.

Speaking before a conference of the International Society of Air Safety Investigators, Hall said that a decade ago a small group of knowledgeable aviation journalists set the tone at crashes, and coverage was generally good. Now, Hall said, speculation and misinformation are far too common.

"I do think the media need to address what's going on in their institution," Hall said in an interview after his speech. "It's

dangerous to our free society for our media to be losing credibility as (they have)."

Hall displayed for the more than 300 aviation experts gathered here a series of videotapes and slides showing news broadcasts and newspaper headlines that contained speculative or erroneous information.

Among them was a report after the ValuJet crash in 1996 that raised questions about the flight crew and another report the same year on former ABC reporter Pierre Salinger's allegation that a missile had shot down TWA Flight 800. The ValuJet plane crashed because of a cargo fire, and officials found no evidence of a missile in the TWA crash, which was caused by an explosion in the jet's center fuel tank.

Such reports not only create a false impression among the public, but also force investiga-

tors to expend time and energy dispelling rumors that once were rapidly dismissed, Hall said. Misinformation also can heighten the anguish among those close to the victims.

Hall said the NTSB is not without blame. He said accident investigators can help by refraining from speculation after an accident and by educating journalists.

"I think everyone in that room believes he's right on target," said Frank Del Gandio, a Federal Aviation Administration official and president of the safety group holding the conference.

Several senior aviation journalists have expressed concern in recent months that the NTSB is not equipped to put out information quickly enough to keep up with the media. Hall said the agency is re-examining the way it handles the media.

THE BURNELLI COMPANY, INC.

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October 25, 1999

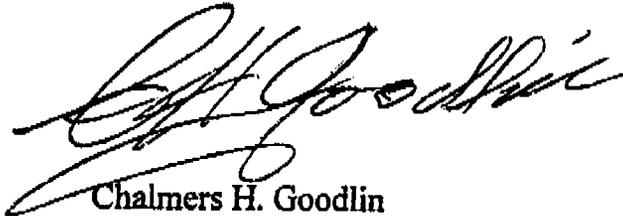
James Hall
Chairman
National Transportation
Safety Board
800 Independence Avenue SW
Washington DC 20594

Dear Mr. Hall,

May I kindly have a response to my letter to you of
September 13, 1999.

Thank you and best wishes.

Sincerely yours,
The Burnelli Company, Inc.



Chalmers H. Goodlin
Chairman & CEO



National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

OCT 27 1999

Mr. Chalmers H. Goodlin
The Burnelli Company, Inc.
2506 Ponce De Leon Boulevard
Coral Gables, Florida 33134

Dear Mr. Goodlin:

Thank you for your September 13, 1999, letter regarding the Burnelli Lifting Body design. You stated that the Burnelli design would significantly reduce the number of aviation accident fatalities. You also enclosed numerous articles and a videotape titled, "Burnelli: The Greatest Story in Aviation History," and you stated that the National Transportation Safety Board's process for fact-finding "in the cause for most air crash fatalities can outstrip common sense."

The Safety Board does not have the authority or the staffing to recommend, endorse, or purchase equipment for research and evaluation. Therefore, the Safety Board cannot evaluate the practicality or safety of your design. The Federal Aviation Administration (FAA) is responsible for the evaluation and certification of all systems to be used on commercial airplanes; therefore, you may wish to contact the following person at the FAA regarding your design:

Mr. Nelson J. Miller, Manager
FAA Technical Center
Aircraft Safety Research Branch (AAR-4)
Atlantic City Airport, New Jersey 08405

I regret that you are not satisfied with the Safety Board's fact-finding process. Please be assured that the Safety Board's fact-finding process is thorough and objective. During our investigations, the Board considers the expressed views of all of the participants and any other comments or suggestions received from the public.

Thank you for your interest in aviation safety.

Sincerely,


Jim Hall
Chairman