

MEMORANDUM

To: The Federal Trade Commission,
c/o Mellon Bank Center,
525 William Penn Way, 27th Floor, Room 153-2713
Pittsburgh, PA 15259-0001
Attention: Wholesale Lockbox Supervisor

CCs: Anthony Serafini, FCC Experimental Licensing Branch
Timothy Pawlowitz, FAA Spectrum Management Group ASR-100
(202) 267-9739

From: Frank L. Rees, Executive VP/Technical Director, Baltimore Operations,
Flight Safety Technologies, Inc., 63 Mountain Green Circle, Candlewood,
Quail Meadow Estates, Windsor Mill, Maryland 21224-2602
(410) 944-6629 (Voice)/4642 (Fax), E-mail: fsti.rees@home.com

Subject: Accelerating the Ratification of a Resubmission of the FCC Form 422 now
Accompanied by the "Remittance Advice" FCC Form 159 in Regard to an
Inexpensive General Aviation Aircraft UNICORN™ Collision Avoidance
Advisory, Terrain Encounter Alert and Ground-Proximity Warning System

Date: September 21, 2001.

This communication concerns an invention known by the acronym UNICORN™ that stands for **UN**iversal **C**ollision **O**bviation and **R**educed **N**ear-miss collision avoidance advisory, terrain encounter alert and ground-proximity warning system. Upon receiving a mid-April, 2001 confirmation of the April 3, 2001 issuance of the UNICORN™ U.S. Patent # 6,211,808 B1 to Frank L. Rees – with assignment to Flight Safety Technologies, Inc. (FSTI) – the FAA was contacted in an attempt to identify an appropriate FAA group concerned with frequency assignment. A frequency or frequency band or one of three bands was required for experimentation with a transmit and receive antenna system for the patented "Collision Avoidance System for use in Aircraft." Tim Pawlowitz of the FAA Spectrum Management Group, ASR-100, was first contacted. In turn, a meeting between FSTI and the FAA was organized through Brandi Loci-Ingargola, the acting head of the FAA Spectrum Management Group ASR-100, whose members and other invitees attended on May 21, 2001. As a result, FSTI attempted to contact Frank Wright (the liaison between the FAA and the FCC) regarding filing an FCC Form 442. For various reasons, a successful contact was not made with Frank Wright until *circa* late June; when he let it be known that he was about to retire.

In response to our request for a set of the appropriate FCC forms on which to make our filing for an assignment of a frequency or frequencies – in order to perform experimentation and calibration of transmission and reception, respectively, through a prototype or various prototypes of a UNICORN™ antenna subsystem (prior to full-scale development of an FAA Certified UNICORN™ System) – Mr. Wright sent a set of FCC Form 422 forms to FSTI. (Not being able to contact Frank Wright after this, we assumed that we had mistakenly noted the number **442**

when, instead, it should have been the FCC Form **422** he had sent us. No mention was made of the need for an accompanying “Remittance Advice” FCC Form 159.)

Consequently, we prepared and submitted this FCC Form **422** on July 20, 2001 *sans* the requisite FCC Form 159! It has since come to our attention that the FCC Form **442** contains both of the FCC Forms 159 and **422**!! Subsequently, our submission was returned almost two-months later, arriving as it did on September 13, 2001. As a result of this apparent oversight, to the dismay of FSTI and that of its investors, this bureaucratic snafu has cost us a two-month or even longer delay in proceeding with FCC/FAA approved UNICORN™ transmit/receive antenna subsystem experiments.

Rather than complain further about this unfortunate matter, FSTI desires to proceed as expediently as possible in obtaining the necessary UNICORN™ frequency band or “spot” frequency assignment(s). In this regard, as one of the outcomes from the May 21, 2001 meeting with the FAA Spectrum Management Group, it was suggested that FSTI reconsider using L-band for UNICORN™ because it is very crowded with FAA Radio Navigation Devices; in spite of the fact that UNICORN™ falls into this category. This was suggested in favor of either locating UNICORN™ somewhere in S-band – which is less densely occupied by FAA long-range surveillance radars – or, better still, at the lower end of C-band below a Doppler weather radar located around 5,300 MHz. The previously submitted FCC Form 422 stated these preferences – rank ordered as C-, S- then L-band – but also stating the desire to be granted permission to operate in certain restricted regions or around “spot” frequencies located in all three microwave bands. Of course, we recognize that other radio-frequency emissions controlled by the FCC also occupy these bands and, therefore, must be avoided in making UNICORN™ frequency-region assignments in the desired microwave operating frequency bands.

In analyzing this frequency assignment request, recently the person who was our initial point-of-contact at the FAA, Tim Pawlowitz, called me to act as such. Consequently, he will be available upon request to assist the FCC in this matter. He may be reached at (202) 267-9739 or by FAX on (202) 267-5901.

As a consequence of the above, FSTI is making an electronic resubmission of this material through the FCC web site using the embedded FCC Form **442** approach. However, the reason for also sending a hard-copy of this package to the Mellon Bank Center and the two CC’s named as recipients of this memorandum is to ensure that this process will move through the system as expediently as possible with all of the facts being known to every party involved. In this context, FSTI makes a strong request that, should there be any further impediments in the way of the smooth progress of this resubmission while passing through the system, we will be informed immediately so that we will be able to take rapid remedial action.

FSTI offers its sincere appreciation in anticipation of the assistance of all parties involved in helping to ensure that the effect of the previous hiatus be minimized.

Very truly,

Frank L. Rees, Executive VP/Technical Director
For Flight Safety Technologies, Incorporated