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09/11/2005 11:12 PM

To Doug Rudolph/ACE/FAA@FAA

cc

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Subject Response to MU-2B Airworthiness Concern

I am in receipt of the FAA Airworthiness Concern regarding the Mitsubishi MU-2B aircraft and feel that my credentials and training experiences will aid in your investigation. I am Reece Howell, III, President and Owner of Howell Enterprises, Inc., located in Smyrna, Tennessee. Howell Enterprises, Inc. is an FAA Part 141 specialized Mitsubishi aircraft training school (Certificate #QHES057K) and has been in business approximately 20 years. I hold the following certificates and ratings: ATP single engine land and sea, multi-engine land, commercial rotorcraft/helicopter, certified flight instructor- airplane and instrument, typed in Lear Jet and BAE 3100/3200. In addition, I am also a designated pilot examiner for Private through ATP and flight instructor renewal and add-on. I've accumulated over 31,000 hours total with more than 17,000 in the MU2 alone.

I started flying the MU2 for CFW Construction Company, Fayetteville, TN in 1971. I received my initial MU2 training in San Angelo, TX and later attended Flight Safety International of Houston, Texas for recurrent training for 3 consecutive years. It was during my employment with CFW Construction Company that I accumulated approximately 6000 hours in the MU2. Following my tenure with CFW, I later started a company managing and operating several Mitsubishis hauling freight for Ford Motor Company. We operated 5 MU2s around the clock 7 days per week for approximately 6 months. During this time I received approval from Avemco Insurance company to conduct in-house training for our staff of MU2 pilots. Shortly after, I started receiving requests from other companies that utilized the MU2 in their businesses to conduct hands-on training for their pilots as well. The demand for this training steadily increased even from foreign countries so we pursued the necessary FAA approval to provide the standardized training which was required on a larger and more global scale. Since receiving FAA approval and the inception of this hands-on training program, we have had more than 3,000 graduates of MU2 Initial and Recurrent training.

With the experiences I have received during all these years of MU2 training, I have never personally experienced any loss of control with the MU2. What I have found is that pilots will often cease flying the airplane in a training scenario and try to resolve a problem by utilizing their checklist as a "to do" list rather than the quick reference checklist it is designed to be. The Mitsubishi is a high performance aircraft and it does demand that the pilot fly the airplane and never stop flying. We have simulated all types of emergencies and have repeatedly found that the aircraft will perform as it was designed provided the pilot flies the airplane as it should be flown. Many piston pilots moving into turbine aircraft will often revert back to the piston practices of dead foot dead engine, banking into the good engine, throttles full forward to identify the dead engine, over-controlling the aircraft, pitching the aircraft nose too high when simulating an engine failure, which causes the airspeed to decrease. As airspeed slows pilots have a tendency to raise the nose and add more power to the good engine, which can cause the airplane to stall and spin. All of these scenarios can result in a pilot-induced uncontrolled aircraft.

The following are some actual occurrences of such scenarios that I have personally experienced in training situations:

1) In 1986, Epps Air Service was awarded a contract for The Federal Reserve and I, as their check pilot, was requested to conduct the MU2 training for their MU2 pilot staff. After training, an FAA Inspector was to observe my conducting the staff check rides to approve me as the company's check airman. The inspector stated, "I don't observe check rides I give them." He stated he had approximately 55 hours when I inquired how much MU2 time he had. He told me I didn't have to ride along but I was required to do so due to insurance requirements. A total of 5 Epps pilots were on board the J model MU2. Just after liftoff, the inspector brought the power lever to flight idle, and the pilot identified and verified that the right

engine had failed. The pilot stated, "feather the right engine" (which is only to be simulated), and the inspector stated, "don't feather the engine" and did not advance the power lever back to the "0" thrust position. This created a great amount of drag, the aircraft was unable to climb and speed decreased rapidly. As the aircraft approached VMC, it slowly began to roll to the right and lose altitude. I began to yell, "Get the power up" and about the time I was able to get out of the seat belt and move forward to the cockpit, the inspector pushed both power levers full forward. I reached up and brought the power levers back to lower the temp and torque to normal takeoff limits. This demonstrates that instructors training others need to understand that flight idle is a drag situation and not "0" thrust! This could have resulted in an uncontrolled aircraft due to an uninformed and inexperienced instructor, which would not have been attributable to the performance of the aircraft.

2) While in a holding pattern at 5500 feet VFR in a 10-mile leg holding, a student requested to continue the holding pattern while one engine was shut down for more single engine procedures practice. By not using the proper procedure of adding power to maintain altitude each time he made the turns, he sacrificed air speed to maintain altitude. After several turns, the airspeed had reached approximately 100 knots, which was uncomfortably close to VMC! When I brought his airspeed to his attention, I was anticipating he would lower the nose and add power. Instead, he pushed the power on the good engine up, which caused the airplane to roll into an approximate 60 degree bank. We recovered by reducing the power on the good engine and lowering the nose to increase speed above VMC. Even though this was a minor loss of altitude it could have resulted in an uncontrolled aircraft if proper techniques had not been implemented.

These are just two incidences which have occurred during training sessions which I've experienced and if I had not been on board the aircraft and taken proper action, they both may have resulted in "out of control" situations. Again, not the fault of the aircraft.

All of the above items are examples of pilot-induced errors not knowing how to respond appropriately - it is not that the airplane has loss of control. In the past, the MU2 experienced several concerns including flap rigging, improper engine rigging that could result in aircraft handling difficulty such as power lever and condition lever splits and flight idle fuel flow and blade angle. Over the past few years, these concerns have been righted as more aircraft maintenance shops have become more familiar with the MU2 and proper maintenance techniques.

During my experiences, the majority of these "uncontrolled aircraft" scenarios that I have experienced directly relate to either insufficient training or no training at all of the pilot. The MU2 is very affordable to many, however, when it comes to training, many owners/pilots feel the only reason they need recurrent training is due to an insurance requirement only. I have read many articles stating that "simulator" training is "adequate" training, however, we have had many enrollees in our course over the years who received their initial MU2 training in a simulator and then came to Howell Enterprises for "hands on" training because they've either had some unsettling experiences or did not feel competent enough to fly the aircraft after completing simulated training only. I feel simulator training can be an asset to an MU2 pilot; however, it does not solely replace hands-on training in the MU2. In my personal opinion, the MU2 will fly very well on one engine. The only reason a pilot could lose control of the aircraft after loss of an engine is when they stop flying and the training they have received alludes them as they "freeze" in an emergency situation.

In summation, I believe the MU2 performs better and offers more flexibility than any other aircraft currently available and is one of the best built and safest airplanes on the market today. It exceeds many of its own performance specifications.

In my professional opinion, I feel the following are contributing factors in order of their importance to "uncontrolled aircraft" situations:

1. Lack of Sufficient Pilot Training or No Training At All

2. Pilot Judgement
3. Situational Awareness
4. Substandard Aircraft Maintenance

I have proven with my own safety record that the aircraft can be flown safely if proper aircraft training techniques are followed and the aircraft is respected for the power and performance that it has. As a result, I invite you to attend one of my MU2 training courses and experience first-hand my training techniques and procedures as well as my curriculum and training materials. If I can be of additional assistance, please don't hesitate to contact me at 800-332-6822 or reece@mu2b.com.

Reece Howell, III

PROFESSIONAL FLIGHT TRAINING, L.C.
1735 Ottawa Road · Salina, KS 67401
(785)820-5800 · (785)493-6040

September 11, 2005

Mr. Doug Rudolph
Aerospace Engineer
Small Airplane Directorate
901 Locust Street, Room 301
Kansas City, MO 64106

Dear Mr. Rudolph,

I wish to comment on the Airworthiness concern with regards to all Mitsubishi Model MU-2B airplanes.

I am a MU-2 pilot; my experience in the airplane is over 20 years. I have flown the airplane as a 135 pilot on a nightly cancelled check run for the Federal Reserve Banks, as a Corporate Pilot for 15 years, and now I am giving ground school system training and flight training to pilots for the MU-2. I have over 10,400 hrs. in the Mitsubishi MU-2 and am approved by the insurance underwriters so pilots can acquire insurance for their MU-2's, after attending and passing my training program, as of this date I have trained and worked with 110 MU-2 pilots of all different MU-2 models and pilot skill levels.

Your concern about loss of control of the MU-2B should not be a concern. The MU-2B in my opinion and experiences is of a very straight forward basic flying corporate turbo prop aircraft. Its flight characteristics are very obvious to a well trained pilot. During flight training in the actual aircraft, stalls, slow flight, steep turns, VMC demos, simulated and actual single engine flight and landings are a every day training maneuvers, all resulting in straight forward and predictable safe results, when the pilot fly's as the aircraft is meant to be flown.

In IMC and icing conditions, again, the MU-2 responds well and is stable in all flight configurations from straight and level cruising flight to instrument approach to landing when the pilot uses the proper procedures for the weather conditions encountered.

As for the two stated MU-2 accidents in the Denver area the accident on Dec. 10, 2004 is a case of poor judgment by the pilot. The aircraft flew the pattern as expected until the pilot stalled the aircraft on short final to the runway. In this situation the pilot should not have been in the position he put himself in. (Low to the ground, low airspeed, to close to the airport for the attempted maneuver, a steep banking turn in the attempt to turn to the runway that was overshot instead of positioning the aircraft on a longer and stabilized straight in final approach).

With the experience I have, giving flight training in the aircraft and flying the MU-2 with one engine feathered, maneuvering on only one engine, conducting airborne NTS checks and being involved in an investigation and flying an actual MU-2B-60 accident flight route there is no doubt the MU-2 can maintain airspeed, altitude and climb on only one engine when the aircraft engines and airframe are properly maintained.

The August 4, 2005 accident makes one believe the pilot may have tried to duck under the weather until you learn that other aircraft (of a different manufacture) have also had accidents while on the same approach to the same airport and in similar weather conditions. This information or knowledge leads one to suspect the approach accuracy. But, this information and the other aircraft accidents are not mentioned as loudly as any MU-2 incident. All being hyped up for a good news story by the media who has very little knowledge on investigating an aircraft accident. But can very easily entice an emotional and over reaction by others.

In summary, proper training by qualified MU-2 flight instructors is a must for this aircraft. Were proper procedures and judgment calls can be exercised and experienced. So pilots can obtain a high level of proficiency in the MU-2.

Sincerely,

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September 11, 2005

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As a current MU-2 pilot, I am concerned about all the negative publicity this aircraft has been receiving as a result of a number of recent crashes. First of all, I have nearly 5000 hours of Mitsubishi time (all as single-pilot) and find the statements made by a certain group of individuals, (who have little or no time in the aircraft) to be totally outrageous. I won't disagree that the aircraft should require specialized training, and a certain level of experience because it is different, but it is a wonderful aircraft that is a pure joy to fly once you master it.

My experience in MU-2's has taken me to many parts of the country including flying from Salt Lake to Denver (continuing on to Alamosa, Durango and Grand Junction before returning to Salt Lake) on a daily route for American Check several years ago, and during the most weather critical time of the year, at night. I've also held a scheduled check route in the Northeast for several years. Being a night cargo pilot in itself is a dangerous occupation, and sad to say when you're not carrying human cargo, it is easier to make a decision that could compromise safety. Oftentimes the planes are not as well equipped. Add that to the fact that sometimes it's hard to get sleep during the daytime. All these issues can contribute to the possible chain of events that can lead to an accident.

But what many people don't realize is that most every night there is a whole fleet of aircraft in the skies, flying checks, mail, lab samples, auto parts, you name it to their destinations and many of them are MU-2's. Millions of miles, night after night, and you only hear of the accidents, not the fact that they usually complete their assigned routes in a timely manner the majority of the time, without incident.

Though I no longer fly checks, I still fly an MU-2 as a corporate pilot. I find this aircraft to be predictable in every phase of operation that I've ever experienced. I have flown this aircraft in many different circumstances and various conditions and there is nothing I'd rather fly. I continue to train at Howell Enterprises, and I consider Reece to be the best source of training in the field. I would suggest that anyone who really wants to know what a MU-2 can do, to spend a few hours in the air with him. It will enlighten you and give you a respect for an airplane that really is one of the best ever made.

Sincerely,

[redacted]

AirDirect, LLC

[redacted]

September 8, 2005

[redacted]

Doug Rudolph
FAA Small Airplane Directorate
901 Locus Street Rm 301
Kansas City MO 64106
Email: doug.rudolph@faa.gov
Fax: 816-329-4090

Re: Mitsubishi MU2B Safety Evaluation Investigation

Dear Mr. Rudolph

I have in the past owned and operated MU2 series aircraft in both corporate and on demand air charter operations (passenger). Today, my company operates a Cessna Citation aircraft, which is a direct result of input and comments from my customers who were concerned (without exception, their sources were all people that had absolutely no firsthand knowledge of MU2B aircraft) about the safety record of the MU2B aircraft. Just so you are clear on the facts, I do not do not own stock or any investment in MU2B aircraft nor do I currently operate them. As such my comments will be based only on my observations from many years of operating these aircraft. My goal in writing this letter is to provide information from a perspective that has no hidden agenda. I am only interested in providing accurate information so persons can make informed decisions based on reality.

As I understand from my initial training, the MHI design goal for the MU2 was to create a high performance aircraft that could for all practical purposes fit into a hanger suited for a Cessna 172. The aircraft would need to have the ability to use short unimproved airstrips and offer very high cruise performance. For the most part these design goals were achieved. As a result of its design, the aircraft exhibits some unfamiliar characteristics, provided you learned to fly in a Cessna, Piper, or Beech type of aircraft. Had we learned to fly MU2B aircraft, the Cessna, Piper or Beech aircraft would exhibit unfamiliar characteristics. Given the majority of today's pilots have learned in traditional control types of aircraft, the MU2B has suffered from a lack of proper training. In recent years, Mitsubishi and Turbine Aircraft Services have focused on improved training including sponsoring free training seminars. This additional education has worked to lower the accident rate to a level equal to or better than rates of other comparable turbine powered aircraft.

The slow speed handling characteristics of the MU2 aircraft are not that different than other high performance aircraft with similar wing loading. Early Lear jets (I hold a LRJET type rating) have very high wing loading. Any pilot flying aircraft with high wing loading must be vigilant with speed management. The MU2 has often been criticized for using spoilers for roll control. While different than most GA aircraft, (my opinion here) its use of spoilers is one of the design features I liked most. It does require pilots to be familiar with the proper trim procedure in an engine out condition. The spoilers provide excellent roll control in all phases of flight, and do so without imposing any adverse yaw.

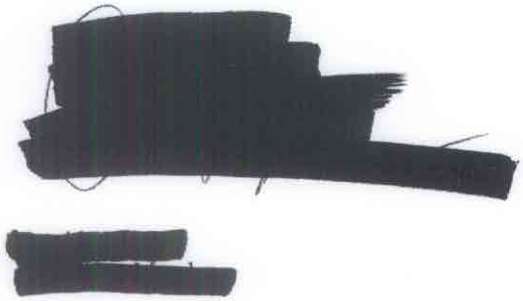
Having operated and flown in a wide variety of aircraft in all type of weather conditions, I cannot imagine a better and more capable aircraft than the MU2 for severe weather encounters, or situations demanding extraordinary performance. I consider this aircraft to be exceptionally safe if flown by properly trained crew and maintained by experienced maintenance facilities or persons. I believe one of the factors that contributed to accidents in this

aircraft is low market value. When this aircraft is being investigated, the average selling prices decline. As the price is reduced, operators with limited resources and experience are given the option to purchase a high performance aircraft at bargain basement prices. A lot of these operators cannot afford the time or money to invest in the quality initial and recurrent training that high performance aircraft demand. This often results in an accident or incident that reflects poorly on the MU2 aircraft.

In reviewing the most recent Colorado accidents (APA), it appears one aircraft was VERY stable and for whatever reason continued to descend below glideslope and struck the ground prior to arriving at the runway. I would image that the MU2B aircraft, given the quality of construction, would provide better protection when flown into the ground than most others in this class of aircraft. However, I do not believe that any aircraft is a match when it comes to impacting a ridge at 140 knots! Nor does this accident appear to have anything to do with loss of control based on aircraft design. It appears to be a pilot error or an avionics system failure.

The other accident is typical of single engine approaches and steep turns. Given the close proximity of the ground, I would expect that the aircraft stalled and crashed due to the pilot attempting a maneuver that the aircraft was not capable of completing in an engine out configuration. I would also expect this maneuver executed in any other high performance aircraft would have the same outcome. The NTSB accident database is full of accidents that happened while turning from base to final with a steep angle of bank at close to stall speeds regardless of whether one or both engines were operating (C-150's included). The stall spin at low altitude does not allow any room for recovery. Does this make the MU2B series of aircraft unsafe? No!

Sincerely,



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From: [redacted] <midcoast@gte.net>
To: "Doug Rudolph" <doug.rudolph@faa.gov>
Sent: Friday, September 09, 2005 8:28 PM
Subject: MU2 Safety Evaluation comment

Dear Sir:

This is in response to your request for comments via your Airworthiness Concern Sheet dated 9/2/05 with respect to FAA's Safety Evaluation Investigation of the Mitsubishi MU-2B airplanes.

Should you need to contact me, my contact information is [redacted] Mid-Coast Air Charter, Inc., 4107 Rice Blvd., Houston, Texas 77005, 800/299-6470 (voice, 24/7), 713/660-6615 (fax) and e-mail midcoast@gte.net.

My company, Mid-Coast Air Charter, Inc. (MM9A507W), is a single-pilot (me), single-aircraft (1981 Mitsubishi MU-2B-60) FAR 135 operator based at Atlantic Aviation, 7930 Airport Blvd., Houston, Texas 77061, at Houston, Texas' Hobby Airport (HOU). My company has operated Mitsubishi MU-2B series aircraft exclusively under FAR 135 since April 14, 1979. I have flown in the charter business since May, 1985 (PA31, Cessna 401, PA60 and BE10), and have flown the MU2 aircraft exclusively since joining Mid-Coast Air Charter in September, 1989, accumulating 7081 hours in the MU2 over 16 years as part of my 10757 hours total time.

The short answer to your inquiry about whether I have ever lost control of the MU2 aircraft, or whether I have thought I might lose control of the MU2 aircraft, or whether I even worry about losing control of the MU2 aircraft: no, *no*, and NO, in that order.

I have lost an engine twice in the MU2 Marquise, at altitude, and have flown on one engine to uneventful landings over a period of 10 minutes in one instance and 30 minutes in another instance. Both engine failures were reported to NTSB and FAA; the first was due to a nozzle problem 241 hours after servicing (factory recommended nozzle service at 400 hours, I now do 200 hours), and the second was due to a ring gear failure traced back by the manufacturer to an improper hand finish applied during factory overhaul to a piece supporting the ring gear. I train annually at Simcom, previously at Flight Safety, and had no questions about what to do and no worries about what the aircraft would do.

Although I attend Simcom simulator training annually, I take semi-annual checkrides with my POI (or someone in the FSDO he may designate) based in the Houston, Texas Flight Standards District Office. To my knowledge, my current POI is Richard E. Law, with whom I have taken four checkrides. Besides Mr. Law, I have taken checkrides with Marcus Sampson (2), Robert Fuller, Thomas Latson (2), Gale Huey (2+), and John Wege. Some of these individuals have moved within the FAA, perhaps overseeing Continental Airlines or Express Jet Airlines. Mr. Huey and Mr. Latson both have experience in the MU2 (I know Mr. Huey's is extensive). You might contact them to see if they were concerned after having seen the aircraft demonstrated in single-engine flight or during approaches to stall.

Far from being of questionable controllability, there are demonstrable reasons why this aircraft might be more controllable than most in a broader range of flight conditions. On the low end, although not recently, I have slowed the aircraft with gear down and 40 degrees of flap (full flaps) (at 5000 feet AGL for safety) in order to demonstrate an approach to stall and recovery. The airspeed indicator and book say that the MU2 should stall at 81 KIAS in this configuration. With wings level and controlling the aircraft, I *finally* got the stick shaker at about 68 KIAS and initiated a recovery. This is a safety margin the book would say one should not even have. With the Honeywell TPE 331 engines, when one does approach a stall at slow speed, response is instantaneous when the pilot calls for power and recovery is accomplished with power. Compare that to the P & W turboprop (Honeywell operators refer to those engines as "Push and Wait"), or turbojet/turbofan engines where one must be "spooled up."

Let's look at the other end of the airspeed indicator. The MU2 redline is at 250 KIAS. I can fly or descend through turbulent air at the 250 KIAS redline if I choose with no concern; the MU2 has a 35+ year track record for airframe integrity and hanging together *even after the plane crashes*. My friends that fly the most popular current-

production long-bodied turboprop IMMEDIATELY reduce speed to 190 KIAS or below when encountering turbulence. They may start to wonder whether their particular aircraft has the spar strap modification or not. They may be thinking about, say, the January 27, 2001 Strasburg, Colorado accident or the June 25, 1999 Munson, Florida accident; when control surfaces or wings or empennage depart the airframe, *then* you are talking controllability problems. Although those pilots may not have those thoughts, MU2 pilots do have them about the other type of aircraft and choose to stay in the MU2.

One of the truly outstanding and amazing attributes of owning, operating, and/or flying the MU2 is having factory support, let alone the *NUMBER ONE BEST* rated factory support (*Aviation International News* survey, August 2005, 2004, 2003, 2000)(2005 and 2003 best for any turboprop, 2004 and 2000 best for twin turboprop), all from a manufacturer who has produced no fixed-wing aircraft for 20 years. I couldn't or wouldn't provide this if I was this manufacturer, and neither would the FAA if the FAA were a business. Mitsubishi does so provide this, AND they support six U.S. and two foreign maintenance service centers, AND they make a multi-million dollar investment and continue to support Simcom simulator training, AND they create and host the biennial Pilot's Review of Proficiency Seminars at their expense. The Japanese display honor, pride and commitment not shown by any domestic aircraft manufacturer in supporting this aircraft. The Americans who support this aircraft have long standing experience, history and commitment to the MU2.

I assure you that if ANY MU2 operator or pilot breathed a word of a controllability problem with the MU2, or if a maintenance shop or MU2 Service Center reported any evidence of same on an MU2 aircraft, Mitsubishi and Turbine Aircraft Services would waste no time whatsoever in finding out what the problem was and would not wait for any push from FAA in doing so. If anything, what Mitsubishi has not responded to (partly because they cannot discuss ongoing NTSB investigations) is bad press, driven in large part by plaintiff's attorneys who are often quoted in such press.

Before such bad press and the Colorado legislators' concerns that it fostered, FAA had no problem with the MU2 accident record either. In response to a letter from Mitsubishi Heavy Industries America (MHIA) dated October 13, 2003 requesting that FAA proceed with a FITS program for the MU2, FAA in a letter from Robert Wright to MHIA dated March 15, 2004 states:

"The FAA has researched recent NTSB fatal accident data for the MU-2, and was unable to establish that the fatal
accidents involving MU-2s are extraordinary when compared to other light single and twin turboprop airplanes. Therefore,
without the appropriate empirical data that supports your contention that the MU-2 has flight characteristics that
requires pilot training above that already required by the FAA, we will not be able to mandate additional pilot training."

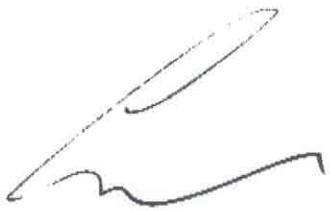
While I am truly sympathetic to FAA's being caught in the middle between Congressmen on the one hand and reality on the other, if anything an FAA action such as this one saps time and resources that Mitsubishi and Turbine Aircraft Services might devote to product improvement, service center and Simcom program support, and the P.R.O.P. safety seminars. Actions such as these might also serve as a disincentive for Mitsubishi to stay in the support business. Even now, if FAA initiated an action like this to evaluate Merlins, Cheyennes, or Twin Commanders, who would be in a position to respond to that as Mitsubishi and Turbine Aircraft Services have for the MU2? Intelligent MU2 owners, operators and pilots do not take Mitsubishi support for granted, and FAA should appreciate that actions which have a political genesis versus those arising from a real safety problem necessarily detract from such support.

What about the recent accidents after FAA's March 15, 2004 letter? From April 15, 2002 to March 11, 2004 we had zero accidents (I hope you won't count, as I don't, running out of fuel or a courier walking into a running propeller on the ground). I didn't study mathematics sufficiently to notice what percentage increase one or four accidents is when you start with zero. The three most recent accidents (8/4/05 APA, which will be a CFIT accident)(5/24/05 HIO, witnesses described a 30-40 degree nose up attitude leading to the aircraft reaching 1000 feet AGL before the end of the runway...I think he might have been a tad slow)(12/10/04 APA, the aircraft flew a left downwind and base leg successfully on the one operating right engine...high power and relatively low airspeed indicated by almost full right rudder trim...before an overly steep left turn to final after overshooting the final approach course) involve a large fleet operator who was apparently not compelled by insurance to do other than in-house training and an individual who steadfastly opposed the need for recurrent training in conversation with other MU2 operators. The 5/14/04 BWI accident...steep turn at low airspeed and altitude with flaps

retracted...tried to change course after entering a pattern for the wrong runway. 3/11/04 APC and 3/25/04 PSF...more mysterious, but are we supposed to assume the worst about the aircraft design in those circumstances? If so, let's have a special certification review for any aircraft that has landed in the ocean or otherwise disappeared.

Yes, proper training (simulator training in particular) would, in my opinion, have made a difference with respect to the most recent accidents.

To my knowledge, the Colorado legislators spoke with no one with any MU2 experience. They started with the bad press the MU2 got immediately after the 12/10/04 APA crash, and they finished by talking to Mr. Robert Cadwalader, who has said twice in print that he has never flown an MU2. Somehow that translated into Mr. Cadwalader's being "an experienced MU-2B pilot" in Congressman Tancredo's letter to Administrator Blakey...I'm glad I wasn't the translator on that one. With all due respect to the Congressmen, I hope that FAA will conclude that FAA's own knowledge of and experience with the MU2 along with the knowledge that FAA is gaining through the comment procedure means more in terms of real safety than the Congressmen's status as Congressmen. Many thanks for your time and consideration.



9/9/2005

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[redacted]
09/09/2005 01:02 PM

To Doug Rudolph/ACE/FAA@FAA
cc
bcc
Subject MU-2B comments from experienced pilot

[redacted]

September 8, 2005

Mr. Doug Rudolph
FAA Small Airplane Directorate

Dear Mr. Rudolph,

I'm writing to you in response to the possible grounding of the MU-2B aircraft after the recent series of accidents. I operated various models of the Mitsubishi MU-2B (MU-2B-20, MU-2B26A, MU-2B-36A, MU-2B-40 and MU-2B-60) for approximately 15 years, up until March of 2004, and accumulated over 12,000 hours of flight time in them. I flew the aircraft in a wide variety of conditions in on-demand charter, many of them quite challenging, from landing on short dirt strips in Baja to flying in icing conditions in the upper Mid-West; went through 3 engine failures; had system failures, etc. and never had an accident or incident in them.

While the airplane is demanding and not the easiest to fly, once you get proper training and hands on experience, it will do a great job for any operator. The airplane is very rugged and well built, and the systems are simple and well designed. The airplane is different from your regular turboprops in many respects, and it has to be flown like an MU-2, therefore the importance of training and adherence to proper procedures cannot be overstated.

While I currently do not fly Mitsubishis, based on my experience and that of many operators with a great deal of MU-2 flight time, when properly maintained and operated, the airplane is very safe, capable and fun to fly.

Please feel to contact me if you have any questions or need further information

Sincerely,

[redacted]

[redacted]

09/09/2005 01:22 PM

To Doug Rudolph/ACE/FAA@FAA

cc

bcc

Subject MU-2 attack

[redacted]

Dear Mr. Rudolph;

I am writing in response to the attack on MU-2 aircraft.

It is not the responsibility of elected government officials to dictate the airworthiness of any type of aircraft. In my opinion, the MU-2 has been singled out and attacked because of personal bias and/or political gain.

I am close friends with a MU-2 owner/pilot and I have several hours in the right seat of the MU-2. The airplane is admittedly complex as are all aircraft in that category and class. I however do not think the airplane has any unusual tendencies and is safe to fly in. I would not climb aboard if I felt differently.

I feel the additional training that was put in place was a valid and positive corrective action. If more aggressive training is needed I expect the pilots to accept the responsibility and attend the needed seminars. I however do not believe grounding the entire fleet is the appropriate action.

Thanks you for your time,

Sincerely,

[redacted]

[redacted]

09/09/2005 01:58 PM

To Doug Rudolph/ACE/FAA@FAA

cc

bcc

Subject MU2 comments

Doug Rudolph
FAA Small Airplane Directorate

September 9th, 2005

Dear Mr. Rudolph,
I am writing this letter on behalf of our company Florida Fast Flight Inc., owner/operator of a short body MU2.
This is our second MU2, the reason for which was an upgrade to dash 10 engines providing increased speed and higher altitudes and the fact that we have tremendous confidence in the operational ability and reliability in comparison to a number of other aircraft in the same weight and price range. We have accumulated more than 1000 hrs in MU2's during which we have operated the airplanes in both northern, Caribbean and domestic conditions with excellent results. Many of these trips include the transport of my family members for whom I would only utilize the safest and most efficient means of transportation.
Although simulator training for the MU2 would require less travel from Miami we complete annual training with Howell Enterprises in Smyrna Tennessee. The benefit of training in our own aircraft is of critical importance and we highly recommend some or all of the annual training be completed in actual flight conditions as the psychological sensitivity to flight is more demanding than in simulator conditions. However, we recognize that is our personal opinion and certainly do not want to discredit simulated flight for those who choose it. Howell's education relative to aircraft maintenance and systems as well as emergency training deserves a very high rating and prepares the pilot for complete confidence in the aircraft.
We find that while Intercontinental Jet in Tulsa is the number one service center for Mitsubishi, there are other recognized service centers that provide quality work on the machine.
We are cognizant of the reaction by the FAA to the requests of four congressmen as a result of accidents in Colorado. After review of the circumstances we do not share the importance given to the evidence nor do we think that it merits concerns regarding the MU2. We suspect that there are political motivations being broached here that might very well be tantamount to supporting the basis for legal action. We do not think that the FAA should be utilized for political circumstances and hope that your good offices do not partake in this needless action.

Respectfully

[redacted]

7-2

[redacted]
>
09/09/2005 02:41 PM

To Doug Rudolph/ACE/FAA@FAA
cc
bcc
Subject MU-2 ACS

[redacted]

Mr. Rudolph,

I am the owner of MU-2 serial number 1505SA. This particular aircraft is a -60 model (Marquise) that is used for both business and pleasure. My personal qualifications are as follows:

-Over 3000 hours of total flying time
-Air Force trained pilot
-Over 1000 hours in high performance military fighter aircraft (F-16)
-Experience in several general aviation airplanes and current owner of a Cessna 414A as well as the MU-2.

Prior to purchasing the aircraft, I reviewed the accident data from all the accidents on www.ntsb.gov. and personally satisfied myself that the airplane could be flown safely. It is a fact that the structure itself is sound and my confidence in the airframe was further bolstered by the SCR that was conducted several years ago. My conclusion is the airframe/airplane is well engineered and safe.

My impressions from flying the aircraft are that it is much more like an F-16 than it is a Cessna 414. This is simply not the kind of airplane that should be flown without proper training. Is a type rating needed? I am in no way opposed to it. A type rating would not change the way I personally approach flying the aircraft. I realize this aircraft is a high performance machine that demands proper training. I have budgeted time and resources to maintain proficiency. That being said, a type rating would help in keeping people out of the aircraft who do not meet a minimum requirement or who fail to take seriously the demands that any high performance aircraft places on the operator. Someone who jumps in this aircraft without proper training and thinks it is going to fly like the Baron they came out of are an accident waiting to happen.

This aircraft is not unsafe. The FAA's review of the certificate came to that same conclusion twice. It must be operated as one would operate any other high performance machine. That is with proper training and maintenance.

Please feel free to contact me with any questions.

Thank You,

[redacted]

[redacted]

September 9, 2005

Mr. Doug Rudolph
FAA – Small Plane Directorate ACE-112 Rm 301
901 Locust St.
Kansas City, MO 64106
FAX: 816-329-4090

Mr. Rudolph,

I am a current MU-2 pilot in models MU-2B-20, 30, 25, 35, 26, 36, 26A, 36A, 40, 60 and have been trained by Flight Safety and Sim Com in their training devices as well as in the aircraft. I began flying the MU-2 in June 1977, 28 years, and have accumulated 3993.8 hours as P/C in the MU-2 with a commercial, instrument rated, SEL, MEL. I am a military trained aviator in regards to basic foundation. My total time to date is 9894.2 hours and have flown the T-37, T-38, T-29C/D, O-1A, O-2A, KC135A, Lear 24 & 25 C/D and the MU-2. Your basic question to the MU-2 pilots is have I ever experienced a loss of control in the MU-2. The answer is no, nor have I ever experienced a loss of control in any other airplane I have flown, both military and civilian aircraft. The MU-2 has never, in 28 years of flying it, displayed any unusual aerodynamic tendencies that I would consider unsafe. It is a heavier than air aeronautical device and, as such there are some basic rules you must adhere to in order to remain in control. These guides and rules are normally communicated to us in the form of training by competent instructors. It is up to the in the individual pilot to follow these rules. As I mentioned earlier, I learned these rules about flying in the USAF flight school in T-37 and T-38 aircraft. We flew these airplanes by firm procedures or we went to other occupations, no exception.

The free market system of general aviation presents a different set of rules to the civilian trained pilot. A multi-engine certificated pilot can gain the rating in a Cessna 310 and is technically licensed to fly any multi-engine airplane weighing less than 12,500 lbs. max gross weight. There is nothing to keep him from doing such except his personal judgment.

Training and judgment are the two things that basically make a safe pilot. These two things make up one side of the equation. On the other side of the equation is the airworthy airplane. If either side of this equation becomes weak then the other side of the equation must compensate. Obviously the airplane cannot compensate for a weak pilot. Nor can a weak pilot compensate for an unairworthy airplane. Both should stay away from each other. The question continues to be how to keep this equation in balance so pilots, passengers, and machines conduct a safe uneventful flight.

The MU-2 in my opinion is a safe airplane. I personally go to Sim Com annually for training and to my FAA designated physician for a flight physical. I only fly airworthy airplanes. I exercise good judgment when doing so and therefore haven't hurt myself. That is not to say I haven't made any procedure errors or done something dumb. These were not the fault of an airplane; they were mine. If you are a pilot or at least drive a car, you know what I mean.

Personal responsibility and judgment are two things that cannot be legislated or enforced by lawsuits. Training is the key to instilling these in a cooperative pilot. The problem is however, many of the recent accidents have involved pilot's that have not attended or passed training in the airplane and have continued to fly, many allegedly without a valid medical too. These are not the fault of the airplane. You already know this.

These are my thoughts on the subject and I would be happy to talk to you if you need more information.

Sincerely,

Professional Aviation Sales and Services Inc.

Doug Randolph
Aerospace Engineer
Small Airplane Directorate
ACE-112
901 Locust Street, Room 301
Kansas City, MO. 64106

September 9, 2005

Ref: Mitsubishi Aircraft

Dear Doug,

I have flown approximately 1100 hours in MU-2 series aircraft and have flown almost all models of these planes. I am currently selling turboprops including King Air and MU-2 Aircraft. I have a deep respect for the magnificent aeronautical engineering present in the MU-2 aircraft. I feel that I have explored the entire flight envelope and flight characteristics of the MU-2 aircraft. I find it to be a very stable and predictable aircraft. The MU-2 as all high wing loaded aircraft requires attention to flying by the 'numbers'. The MU-2 is not a 'fly by the seat of your pants' airplane. I have inadvertently flown in several level 3 and level 4 thunderstorms. I would not have wanted to be in any other aircraft.

The problems with this aircraft are routinely pilot induced problems. It is not fair that the large MU-2 pilot and owner community be punished for these pilot errors. On close scrutiny your agency will find that a majority of the accidents are occurring because some pilots are not receiving simulator training and attending free safety seminars. I have heard several pilots state, egotistically I presume, that "they can fly anything". This arrogance, complacency or whatever is the source of most of the MU-2's incidents. If you care to research the above statements, there are many in the MU-2 community who have also heard this language associated with some of the now deceased pilots.
In summary, this MU-2 Aircraft is a marvelously engineered aircraft. This aircraft requires disciplined pilot skills that are honed through current stimulator training and safety seminar participation.

I personally applaud and commend the excellent job the FAA performs in their pursuit of flight safety.

Sincerely,

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[redacted]

[redacted]

09/09/2005 03:49 PM

To Doug Rudolph/ACE/FAA@FAA

cc [redacted]

bcc

Subject Response to Airworthiness Concern, MU-2 aircraft.

I am an Air Force trained pilot with over fifty-one years as a pilot. I have over twenty-two thousand hours, (22,000), and have flown aircraft as small as the Piper Cub and as large as Four Engine heavy jets. In my thirty-one years in General aviation I have flown most of the twin engine turboprops in the MU-2 class. Our company acquired an MU-2-60 in 1998 on my recomendation. Since then I have flown the aircraft over One thousand, Two hundred, and Seventy-five hours, (1275). I have trained on the aircraft over nine times. Five with Flight Safety, two with SIMCOM, and two with Howell Enterprises, INC. I choose to fly the MU-2 over the other turboprops available, and have concluded it has no dangerous tendencies. The MU-2 is a fast aircraft with a highly loaded wing, and that is exactly the way it fly's. In training I have stalled the aircraft, flown it in slow flight at high angles of attack, and shut down engines.

The MU-2 has been reviewed more than any turboprop in it's class. It has proven beyond a doubt that it is airworthy in icing conditions, and is the only business turboprop that was flown behind the Air Force C135 icing tanker. Films are available to verify it's capability. I have flown the MU-2 in all weather conditions and find it to be very capable. I have also performed single engine approaches and have done many "in flight" shut downs, in training, and while checking the (NTS), negative torque system. I had one flight recently, while on let down and engine quit because of a failed diaphragm in the fuel control. After completing the Engine Shut Down checklist, I proceeded to the airport for landing. The landing in a cross wind was uneventful, and the (6) passengers commented that it was one of my better landings.

The MU-2 is fast aircraft with a large cargo area. It can carry a good load for it's size at a reasonable operating cost. That is why it has become so popular with freight operators, and check haulers. Most of them fly in the worst conditions, at night, in all kinds of weather. No other manufacturer has as many aircraft flying in these conditions. That means the MU-2 has a higher exposure rate. Pilots that fly at night "continually," have a higher accident record that ones that fly in daylight. This has nothing to do with the type aircraft, and has been one of the major concerns of the nations largest freight carrier. Accumulated fatigue will always be a factor of night operators. Also, any emergency at night is more difficult to handle because of darkness and poor visibility.

The MU-2 that I operate is currently undergoing a 7500 hour inspection. This is in accordance with the manufacturers guidance. I would like to draw your attention to the August 2005 issue of the Aviation International News. On page 22, reference product support from the OEMs, "Another interesting result is the overall rating for the out-of production Mitsubishi MU-2, which at 8.76 tops the survey for both jets and turboprops old and new." That in addition to the attendance at the PROP reviews put on every other year by Mitsubishi's, "Turbine Aircraft Services, INC," should indicate that this OEM stands head and shoulders above any other in pursuing a Zero accident rate and superior product support.

Now to the analysis of the accidents in Colorado. While I get very poor updates from the investigating agency, my guesses are only what I can draw from the initial report. One appears to be a stall spin while tightening up a steep turn. I understand the other one is a CFIT, being investigated as is a Conquest 1 that crashed in the vicinity under similar conditions. The ILS may have problems in the rain. While an engine failure on the first one certainly contributed to the result, it could have happened to any make aircraft, since most of the similar makes will stall at high bank angles and high wing loading. There is one other accident that has drawn my particular interest. Hillsboro, OR. 5/24/2005. What would make an MU-2 climb to one thousand feet within the airfield boundary and stall? Maybe a pilot showing his friends how his new airplane would perform? Some pilots, especially in the short body, trim full aft during the flare. This is a very dangerous procedure. If a late go-around is called for the aircraft will pitch up before it can be re-trimmed. Even worse if the pilot forgets to reset the trim before takeoff an abrupt pitch-up will occur

after flying speed is obtained. Since I have very limited short body experience I can't say what would happen. It is also rumored that this pilot had less than 10 hours, and no training in the MU-2. Training centers should warn pilots of this dangerous triming tendency if observed.

In conclusion: I would like to say that none of the turboprops have the support that the MU-2 has. CFIT accidents cannot be blamed on aircraft type. As per the horrible loss of life in the Hendrick's Motor Sports B-200 accident, or the BA-31 accident in MO. While not the performer of the type 25 aircraft the MU-2 is well above most of the turboprops I have flown. I choose to fly the MU-2 over others. I wouldn't fly it if I thought it had dangerous quirks. Training and retraining, and sticking to established procedures are essential. Sincerely [redacted]

[redacted]

[redacted]

09/09/2005 04:07 PM

To Doug Rudolph/ACE/FAA@FAA

cc

bcc

Subject Mitsubishi MU-2 Grounding

I am responding to some very disturbing news that some politicians in Colorado want the FAA to ground the MU-2 because it is a dangerous airplane. Proven in their minds by the fact that two have crashed recently at the same airport in Colorado. I have been flying the MU-2 for fifteen years. and have almost nine thousand hours in the aircraft and have kept up with most of the accidents that have occurred over the years- the majority have been pilot error and the results would have been the same in any light twin aircraft. The MU-2 is a high performance aircraft, but it is very predictable in it's flight characteristics. All you got to do is stay in the performance envelope, which I might add with my opinion is very reasonable. Pilots do dumb things in all types of airplanes, just unfortunate that some folks do not give that much thought when they hire, train, and allow them to operate airplanes in the most difficult situations. Night, weather, ice, thunderstorms, pick one. I think the latest accidents might prove that in spades. I have been in nasty weather, ice, thunderstorms around and have never had a real problem cause I keep the speed up in a high performance airplane and do not put myself in a situation I cannot handle. I might get hit by the golden bb one day, but I think it will not be because the MU-2 is a poorly designed airplane. I think it is great. You got good maintenance, keep the stuff you need working, trained pilots, pilots that will make good decisions and you do not have to deal with crashes. I work for Air 1st Aviation and you can check their track record on the MU-2. It takes two to tango in the flying business. Good maintenance and good operators. I hope you give us folks who make a living flying the MU-2 and love flying the bird a break and put this puppy to bed. Pure nonsense for politicians to act this way, but I guess that is why they are politicians- they have no clue!

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[redacted]

09/09/2005 04:15 PM

To Doug Rudolph/ACE/FAA@FAA
cc [redacted]
bcc
Subject Mitsubishi MU2

Doug Rudolph
Aerospace Engineer
Organization Small Airplane Directorate

Doug,

Since 1970 I have operated Mitsubishi MU2 aircraft for The Keller Comapnies,Inc.of Manchester ,NH.
In the last 35 years we have flown our MU2`s over 55000 accident free hours ! I personally have over 23,000 hours in the MU2.

I have flown the MU2 in most every conceivable weather condition,with no problems.
I have flown the aircraft in all phases of flight,including a few actual single engine approaches and landings. I have never felt threatened with a loss of control. I fly the airplane by the numbers !

Proper pilot training is essential to the safe operation of the MU2. Both Howell Enterprises and Simcom provide excellent training. I feel that some of the accidents are due to a lack of training.or no training at all and a lack general airmanship. Lack of proper maintenance has also been an issue.

[redacted]

[redacted]

09/09/2005 03:48 PM

To Doug Rudolph/ACE/FAA@FAA

cc

bcc

Subject Response to FAA Airworthiness Concern Sheet Dated 9/2/05

This is in response to the FAA's request that all owners, operators and maintenance personnel of the MU-2B airplane provide any comments concerning any loss of control incidents with the MU-2B. I am a private pilot, with a multi-engine instrument rating and a total of approximately 4,400 hours including 1,500 hours in the MU-2. I transitioned to the MU-2 from a Piper Seneca with the assistance of Howell Enterprises. I am confident that had it not been for the detailed, highly structured program of Howell that I could not have made a safe transition to the aircraft. I was taught by Howell Enterprises that this is an aircraft that must be flown with professionalism and attention to detail. When transitioning from a much slower piston airplane, the first area of concern is the need to always stay "ahead of the aircraft." It is only by staying ahead of the aircraft that a pilot can effectively break the error chain. I have recurrent training at least annually at Howell Enterprises or SimCom as well as the manufactured sponsored "Prop" safety program.

In the winter of 2002, after delivery of my aircraft from the 100 hour inspection, I experienced what could have constituted a loss of control incident had I not been properly trained. Although I conducted a thorough ground inspection before takeoff, I inadvertently did not fully extend and retract the flaps. Upon takeoff, I departed with 20° of flaps as instructed, and at about 500 feet I attempted to reduce the flap setting from 20° to 5°. The aircraft then experienced a severe yaw which required full rudder deflection and my immediate attempting to trim the aircraft into straight and level flight. When it soon became obvious that the problem was more than an out of trim indication, and while the flap was still in travel with 20° to 5° I returned the flap setting to 20°. This resulted in straight and level flight after correcting my trim. I returned to the pattern and landed. Upon review by a maintenance professional, it was discovered that one side of

the flaps were not reconnected leaving me with 20° of flaps on the left wing and 5° of flaps on the right.

I had been trained by Howell Enterprises to treat an aircraft being removed from maintenance as though I were a test pilot. I was also told that if something goes wrong in the airplane after some change in a control surface, the first step is to return to the original setting. I recently attempted in the simulator setting at SimCom to maintain control with a 0° and 20° flap setting and was unable to do so knowing the condition and with full rudder deflection. Although my actual incident did not result in loss of control, had it become so due to my lack of training it could have resulted in catastrophic consequences.

I believe the MU-2 to be an exceptionally safe airplane in the hands of a well-trained pilot. Because of its high performance it must be flown precision and with attention to detail. I have the pleasure of knowing a significant number of MU-2 pilots who are well-trained and

serious about their commitment to safety. I have had simulator training pilots tell me that they prefer to train MU-2 pilots because of their concentration and strong stick and rudder skills.

I am troubled about the recent accidents of these aircraft, particularly in light of the fact that a significant contributing factor appears to be pilot error that may have been curable by better training. I believe it is appropriate for the FAA to review training requirements, for the controllability issues under review do not relate inherently to the aircraft but to the pilots that fly them.

[redacted]
Pilot Certificate number is social security number therfore withheld, available on request.