Docket No. SA-539

Exhibit No. 1-L

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Balloon Tour LOA White Paper (18 Pages)



The Case for Inclusion of Commercial Hot Air Balloon Scenic Tour Operators within the Scope of 14 CFR Section 91.147

INTRODUCTION

On February 13, 2007, the Federal Aviation Administration published a final rule that "sets safety and oversight rules for a variety of sightseeing and commercial air tour flights. The rule responds to National Transportation Safety Board (NTSB) recommendations, Government Accountability Office (GA) reports, and the Department of Transportation Inspector General Reports that recommend better oversight of the sightseeing and commercial air tour industry." That rule reads as follows:

§ 91.147 Passenger carrying flights for compensation or hire.

Each Operator conducting passenger-carrying flights for compensation or hire must meet the following requirements unless all flights are conducted under § 91.146.

- (a) For the purposes of this section and for drug and alcohol testing, *Operator* means any person conducting nonstop passenger-carrying flights in an airplane or helicopter for compensation or hire in accordance with §§ 119.1(e)(2), 135.1(a)(5), or 121.1(d), of this chapter that begin and end at the same airport and are conducted within a 25-statute mile radius of that airport.
- (b) An Operator must comply with the safety provisions of part 136, subpart A of this chapter, and apply for and receive a Letter of Authorization from the Flight Standards District Office nearest to its principal place of business.
 - (c) Each application for a Letter of Authorization must include the following information:
- (1) Name of Operator, agent, and any d/b/a (doing-business-as) under which that Operator does business;
 - (2) Principal business address and mailing address;
 - (3) Principal place of business (if different from business address);
 - (4) Name of person responsible for management of the business;
 - (5) Name of person responsible for aircraft maintenance;
 - (6) Type of aircraft, registration number(s), and make/model/series; and
 - (7) An Antidrug and Alcohol Misuse Prevention Program registration.
- (d) The Operator must register and implement its drug and alcohol testing programs in accordance with part 120 of this chapter.
 - (e) The Operator must comply with the provisions of the Letter of Authorization received.

From the preamble: "This rule applies to commercial air tours conducted in airplanes and helicopters only. It does not apply to gliders (powered or unpowered), balloons, parachutes (powered or unpowered), gyroplanes, or airships."

The authors of the regulation provide no basis for excluding aircraft other than airplanes and helicopters. However, certain assumptions may be plausible:

- 1) Gliders, balloons, parachutes, gyroplanes, and airships generally do not transport large numbers of passengers: normally 1-2.
- 2) These aircraft are capable of short range flights only.
- 3) These aircraft may or may not operate from airports.
- 4) Tour operators in such aircraft are not large in number and do not comprise a formidable sector of the aviation industry.

It is the purpose of this paper to inform the FAA of a significant segment of the air scenic tour industry that has been overlooked but is deserving of FAA attention and oversight: commercial hot air balloon scenic tour operators. A proximate objective is to include such operators within the provisions of §91.147 so as to compel such operators to register with the FAA and to conform to the provisions of a Letter of Authorization in the same manner as tour operators conducting scenic flights in airplanes and helicopters.

The justification for this proposal is predicated upon the following:

- 1) Size and scope of the industry
- 2) Size of aircraft flown
- 3) Pilot certification and minimal proficiency standard
- High accident rate among commercial hot air balloon tour operators
- 5) Minimal or non-existent FAA oversight

Additional elements in this report include:

- 6) Anticipated industry objections and FAA response
- 7) Promotion of any rule or policy change

INDUSTRY SIZE AND SCOPE

There may be a perception by the public and the FAA that commercial hot air balloon scenic tour operations are insignificant when compared to airplane and helicopter tour operations. As perhaps a testament to FAA insensitivity to this segment of aviation, there is no FAA database depicting the number and whereabouts of commercial balloon tour operators. The most comprehensive listing appears to be in a website at www.blastvalve.com.

The website does not purport to serve as the ultimate source for all commercial hot air balloon tour operators in the United States. There are any numbers of airmen holding a Commercial-LTA (limited to airborne heater) FAA certificate who own small balloons but routinely *hold out to the public* with an offer of balloon scenic tour flights. At *blastvalve*, the viewer will generally be taken to a larger operator's website in which that operator *holds out to the public*.



As a comparison, in *www.helicopterlinks.com*, there are less than seventy-five (75) helicopter tour operators in the entire United States. Thus, it may be argued that commercial balloon scenic tour operators far surpass helicopter operators in numbers yet are excluded from §91.147.

AIRCRAFT FLOWN

Hot air balloons come in a variety of shapes and sizes; from small, oneperson sport balloons to eleven story tall behemoths. It may be of some surprise that the largest balloons carry more passengers than a Beech 1900 airliner. A view of the following photos is revealing.



Orlando Balloons Rides added another balloon to its fleet today. But it's not just another hot air balloon. This balloon is 11 stories high when fully inflated and carries up to 24 passengers. It's the largest hot air balloon in the U.S.



From a Midwestern balloon operator website:

How many people go into the basket?

It depends on the size of the balloon. Most of our areas have several sizes of balloons, the largest capable of taking 16 persons plus the pilot. We are usually flying our larger balloons on the weekends. However, we have 12 person, 10 person, 8 person and 4 person balloons for smaller parties. We bring out the best size to comfortably lift the number of people who book on a given day.

In addition to gigantic balloons capable of transporting a dozen or more patrons, large operations employ multiple balloons with a carrying capacity of 9 passengers each. An operator can then launch five balloons with a total occupancy of 45 passengers.

It is important to appreciate the economic impact of commercial hot air balloon tours. When fifteen passengers pay \$250.00 each, there could be exceptionally strong motivation to launch a flight that is worth nearly \$4000.00 in one hour. This powerful incentive to launch, sometimes in marginal conditions, may be the stimulus for an unusually high accident rate among all balloon accidents in the past two years as will be revealed later in this report.

PILOT CERTIFICATION AND PROFICIENCY

In the FAA's certification paradigm, it is exceptionally easy to obtain a Commercial Pilot Certificate with an LTA Rating-Limited to Airborne Heater. A Private Pilot (balloon) can apply for a Commercial Pilot certificate with only 20 hours' time, 10 flights in balloons, and just 2 flights as PIC in balloons.

There is no requirement under the Federal Aviation Regulations that requires pilots of commercial hot air tour balloons to submit to more robust initial or annual recurrent training. Further, the regulations do not stipulate training and proficiency demonstration in large balloons which are admittedly more difficult to manage and predict. The only recurrent training

requirement is the flight review conducted biennially per §61.56. Although professional operators with a strong commitment to safety may require stringent pilot training and checking, sometimes mandated by the insurance carrier, there is no regulatory obligation to do so.

BALLOON ACCIDENTS

In comparison to other forms of aviating, hot air ballooning is the most volatile. Consider: 1) takeoffs and landings occur off airport in areas with diverse topography, micro weather systems, and obstructions; 2) balloons are, essentially, uncontrollable to a large extent and are dependent upon wind conditions that can change in direction and intensity in moments; 3) large balloons with hundreds of thousands of cubic feet of air packed into an envelope are slow to respond to pilot inputs requiring exceptional planning and skill to overcome inertia; 4) multiple passengers are a source of constant interruption to the pilot; 5) because of low level flight, obstructions such as power lines and antennas create significant hazards.

Balloon accidents are generally spectacular garnering intense media coverage.



A hot air balloon crashed into a San Diego backyard Monday just moments after a couple aboard were married — and it was all caught on camera.

INVESTIGATIVE UNIT

HOME > NEWS > LOCAL

Hot Air Balloon Safety Examined

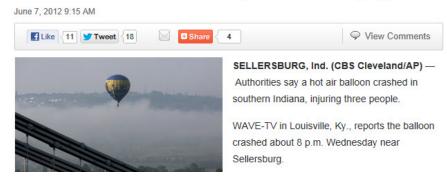
The NBC Bay Area Investigative Unit analyzes government accident data.



National Transportation Safety Board records show that 1,350 people have been hurt hot air ballooning since 1964. According to the same data, 73 people nationally and seven people in California have died in hot air balloon accidents. Four of those accidents happened in the greater Bay Area. Morgan Hill saw two fatalities, and Davis and Yountville each saw one fatality. Pilots say that the number of accidents is low relative to the number of passengers they take up in the air.

"On average, I would say about 200 to 250 people a day," said Jim Kimball, pilot with the company Napa Valley Aloft.

Hot Air Balloon Crashes Into Power Lines Moments After Passengers Get Engaged





Crews work to free a hot air balloon that became entangled in power lines Saturday morning. (KTLA-TV)



KTLA News 4:17 p.m. PDT, April 14, 2012

TEMECULA (KTLA) — Nine people were taken for a bumpy ride after their hot air balloon unexpectedly came down Saturday morning.

InfoBarrel Business Entertainment Health Home

In 1997 there were only 2 people who died in hot air balloon accidents, but when you compare the number of flight hours to that of a fixed-wing aircraft the stats show that there is over a 4X higher chance of being involved in an accident in a hot air balloon then a regular airplane [2879]. Contrary to popular belief, these balloons are much more dangerous than many other modes of transportation. There have not been as many hot air balloon deaths, but compared to the percentage of actual flight hours a hot air balloon is definitely much more dangerous than a winged aircraft flight.

In a review of NTSB hot air balloon accident reports in the following pages for a period March, 2010 thru August, 2012, twenty-nine (29) accidents are reviewed. Of these, at least sixteen (16) or more than 50% of all ballooning accidents appear to have been commercial tour operations involving multiple passengers. The reports highlighted in "yellow" are presumed to be commercial balloon tour operations.

Current Synopsis	PDF Report(s) (Published)	Event Date	Estimated Release	<u>Location</u>	Make/Model	<u>Regist.</u> Number	NTSB No.	Event Severity	Type of Air Carrier Operation and Carrier Name (Doing Business As)
Factual	<u>Factual</u> (08/24/2012)	8/2/2012		Colorado Springs, CO	AEROSTAR INTERNATIONAL INC S81A	N5316Q	CEN12CA511	Nonfatal	COMM 11 PAX 1 SERIOUS
<u>Probable</u> <u>Cause</u>	Factual (07/17/2012) Probable Cause (09/13/2012)	6/17/2012	9/13/2012	Pierce, NE	NATIONAL BALLOONING LTD 858	N9005E	CEN12CA393		3 PAX. 1 SERIOUS
Factual	Factual (08/01/2012)	6/6/2012		Sellersburg, IN	CAMERON BALLOONS Z-90	N401DJ	CEN12CA347	Nonfatal	3 PAX 1 SERIOUS 1 MINOR
Probable Cause	Factual (05/21/2012) Probable Cause (06/28/2012)	5/5/2012	6/28/2012	Hallsville, MO	BALLOON WORKS FIREFLY 7-15	N9079S	CEN12CA279	Nonfatal	1 PAX UNINJURED
Probable Cause	Factual (07/11/2012) Probable Cause (09/13/2012)	4/16/2012	9/13/2012	Clemont, FL	ULTRAMAGIC N425	N990BR	ERA12CA328		COMM 3 PAX 1 SERIOUS
Preliminary	<u>Preliminary</u> (04/23/2012)	4/12/2012		Janesville, WI	AEROSTAR INTERNATIONAL INC RAVEN S49A	N70451	CEN12LA248	Nonfatal	COMM 2 PAX 1 MINOR
Probable Cause	Factual (05/15/2012) Probable Cause (06/28/2012)	4/10/2012	6/28/2012	Sedona, AZ	AVIAN BALLOON MAGNUM IX	N20513	WPR12CA163 B	Nonfatal	COMM 14 PAX
Probable Cause	Factual (05/15/2012)	4/10/2012	6/28/2012	Sedona, AZ	AVIAN BALLOON MAGNUM IX	N2037U	WPR12CA163 A	Nonfatal	COMM 14 PAX

	Probable Cause (06/28/2012)								
Preliminary	<u>Preliminary</u> (04/17/2012)	3/16/2012		Ayra Valley, AZ	RAVEN INDUSTRIES INC S-66A	N57194	WPR12LA138	Nonfatal	COMM 9 PAX
Preliminary	<u>Preliminary</u> (03/23/2012)	3/16/2012		Fitzgerald, GA	FIREFLY BALLOONS INC FIREFLY 8	N14643	ERA12LA231	Fatal(1)	COMM PILOT FATAL
Probable Cause	Factual (05/16/2012) Probable Cause (06/28/2012)	2/17/2012	6/28/2012		LINDSTRAND LBL180A	N49CD	WPR12CA173	Nonfatal	COMM 9 PAX
Probable Cause	Factual (12/07/2011) Probable Cause (02/06/2012)	11/13/201	2/6/2012	Vacaville, CA	CAMERON BALLOONS A-315	N65400	WPR12CA035	Nonfatal	COMM 14 PAX 1 SERIOUS
	Factual (10/25/2011) Probable Cause (12/01/2011)	9/16/2011	12/1/2011	Mingo, IA	BALLOON WORKS FIREFLY 8	N3181A	CEN11CA654	Nonfatal	1
Probable Cause	Factual (10/28/2011) Probable Cause (12/13/2011)	9/6/2011	12/13/2011	Park City, UT	AEROSTAR INTERNATIONAL INC S-60A	N7154E	WPR11CA435	Nonfatal	
Probable Cause	Factual (12/13/2011) Probable Cause (02/06/2012)	8/20/2011	2/6/2012	Lewiston, ME	LINDSTRAND BALLOONS 180A	N75213	ERA11LA469	Nonfatal	COMM 9 PAX 1 SERIOUS 4 MINOR
<u>Probable</u>	<u>Factual</u>	7/27/2011	10/20/2011	Hartsel, CO	KUBICEK BB85	N1545T	CEN11CA517	Nonfatal	COMM 10 PAX 1

Cause	(09/15/2011)								SERIOUS
	Probable Cause (10/20/2011)								
Probable Cause	Factual (09/15/2011) Probable Cause (10/20/2011)	7/22/2011	10/20/2011	Clark, CO	CAMERON BALLOONS US AX10	N2012J	CEN11CA520	Nonfatal	COMM 9 PAX 1 SERIOUS 2 MINOR
<u>Probable</u> <u>Cause</u>	Factual (10/05/2011) Probable Cause (11/22/2011)	6/18/2011	11/22/2011		HEAD BALLOONS INC AX8-88	N8190V	ERA11CA353	Nonfatal	
Probable Cause	Factual (07/21/2011) Probable Cause (09/19/2011)	6/16/2011	9/19/2011	II a Cantar MN	LINDSTRAND LBL120A	N5595L	CEN11CA398	Nonfatal	
Probable Cause	Factual (03/24/2011) Probable Cause (05/26/2011)	10/16/201 0	5/26/2011	Cottonwood A7	LINDSTRAND BALLOONS 90A	N807 P W	WPR11LA017	Nonfatal	
Probable Cause	Factual (09/08/2011) Probable Cause (10/17/2011)	9/29/2010	10/17/2011	Adriatic Sea, Unknown	BALLONBAU WORNER GMBH NL-1000/STU	N801NM	ERA10LA511	Fatal(2)	
Probable Cause	Factual (09/28/2010) Probable Cause (03/16/2011)	9/12/2010	3/16/2011	Ft. Wayne, IN	HEAD BALLOONS INC AX8-88	N2064W	CEN10CA543	Nonfatal	

Probable Cause	Factual (11/14/2010) Probable Cause (05/11/2011)	9/1/2010	5/11/2011	Hanover, NH	HEAD BALLOONS INC AX9 118	N2267U	ERA10CA462	Nonfatal	COMM 7 PAX 1 SERIOUS
Cause	Factual (09/16/2010) Probable Cause (12/20/2010)	7/30/2010	12/20/2010	Longview, TX	LINDSTRAND 69A	N96LN	CEN10CA456	Nonfatal	
Probable Cause	Factual (07/23/2010) Probable Cause (10/21/2010)	6/27/2010	10/21/2010		LINDSTRAND BALLOONS 77A	N60029	CEN10CA357	Nonfatal	I
Probable Cause	Factual (09/28/2010) Probable Cause (01/07/2011)	6/18/2010	1/7/2011	Grants Pass, OR	ARBC INC DBA LINDSTRAND 120A	N501LB	WPR10LA300	Nonfatal	COMM 9 PAX 3 SERIOUS
<u>Probable</u> <u>Cause</u>	Factual (06/25/2010) Probable Cause (07/22/2010)	5/15/2010	7/22/2010	Hilliard, OH	AEROSTAR INTERNATIONAL S57A	N9002Z	CEN10CA257	Nonfatal	
Probable Cause	Factual (06/10/2010) Probable Cause (08/12/2010)	4/2/2010	8/12/2010	Durhamville, NY	FIREFLY AX8B	N1514G	ERA10CA211	Nonfatal	

+										
	Probable Cause	Factual (05/11/2011) Probable Cause (07/12/2011)	 7/12/2011	Rancho Santa Fe, CA	ULTRAMAGIC S-160	I	N30048	WPR10LA169	Nonfatal	COMM 9 PAX 3 SERIOUS
	Probable Cause	Factual (01/05/2012) Probable Cause (03/08/2012)	 3/8/2012	Phoenix, AZ	HEAD BALLOONS INC AXS	118	N3087D	WPR10LA161	Nonfatal	COMM 5 PAX 4 MINOR 1 SERIOUS

Thus, by virtue of the fact that the accident rates for commercial balloon operations, presumably flown by professional pilots, are a significant percentage of total balloon accidents, this data provides ample justification for enhanced FAA oversight.

FAA OVERSIGHT

The oversight of banner towing operations is of a higher FAA priority than the administration's oversight of an industry that flies thousands of citizens annually. Consider that the FAA issues a Letter of Authorization to each banner tow operator. As a result, the FAA knows every pilot who flies for the company; knows every aircraft utilized by that operator; knows the areas of operation. Additionally, General Aviation Safety Inspectors are routinely dispatched to stadiums and fairs to observe banner operations.

As displayed previously in this report, there are several hundred commercial hot air balloon tour operators in the United States. If FSDO management was surveyed, what would be the extent of its knowledge of such operators? It is an exercise that may be justified for the sake of public safety.

In order to capture basic but essential information on commercial hot air balloon tour operations in the United States, a revision to §91.147 seems prudent. As an example, a revised regulation might read thusly:

§ 91.147 Passenger carrying flights for compensation or hire.

Each Operator conducting passenger-carrying flights for compensation or hire must meet the following requirements unless all flights are conducted under § 91.146.

- (a) For the purposes of this section and for drug and alcohol testing, *Operator* means any person conducting nonstop passenger-carrying flights in an airplane, helicopter, or *hot air balloon* for compensation or hire in accordance with §§ 119.1(e)(2), 135.1(a)(5), or 121.1(d), of this chapter that begin and end at the same airport and are conducted within a 25-statute mile radius of that airport *with the exception of hot air balloons since such operations do not generally take off and land at a specific airport or launch site, nor do hot air balloon flights normally consume 25 statute miles in the conduct of scenic flights.*
- (b) An Operator must comply with the safety provisions of part 136, subpart A of this chapter, and apply for and receive a Letter of Authorization from the Flight Standards District Office nearest to its principal place of business.
 - (c) Each application for a Letter of Authorization must include the following information:
- (1) Name of Operator, agent, and any d/b/a (doing-business-as) under which that Operator does business;
 - (2) Principal business address and mailing address;
 - (3) Principal place of business (if different from business address);
 - (4) Name of person responsible for management of the business;
 - (5) Name of person responsible for aircraft maintenance;
 - (6) Type of aircraft, registration number(s), and make/model/series; and
 - (7) An Antidrug and Alcohol Misuse Prevention Program registration.
 - (8) The name, address, and policy number of the operator's insurance carrier.
- (d) The Operator must register and implement its drug and alcohol testing programs in accordance with part 120 of this chapter.
 - (e) The Operator must comply with the provisions of the Letter of Authorization received.

A change in the language of §91:147 must necessarily consider its relationship to §119.1(e)(2). The relevant portion reads:

- (e) Except for operations when common carriage is not involved conducted with airplanes having a passenger-seat configuration of 20 seats or more, excluding any required crewmember seat, or a payload capacity of 6,000 pounds or more, this part does not apply to—
- (2) Nonstop Commercial Air Tours conducted after September 11, 2007, in an airplane or helicopter having a standard airworthiness certificate and passenger-seat configuration of 30 seats or fewer and a maximum payload capacity of 7,500 pounds or less that begin and end at the same airport, and are conducted within a 25-statute mile radius of that airport, in compliance with the Letter of Authorization issued under § 91.147 of this chapter. For nonstop Commercial Air Tours conducted in accordance with part 136, subpart B of this chapter, National Parks Air Tour Management, the requirements of part 119 of this chapter apply unless excepted in § 136.37(g)(2). For Nonstop Commercial Air Tours conducted in the

vicinity of the Grand Canyon National Park, Arizona, the requirements of SFAR 50-2, part 93, subpart U, and part 119 of this chapter, as applicable, apply.

- (3) Ferry or training flights;
- (4) Aerial work operations, including—
- (i) Crop dusting, seeding, spraying, and bird chasing;
- (ii) Banner towing;
- (iii) Aerial photography or survey;
- (iv) Fire fighting;
- (v) Helicopter operations in construction or repair work (but it does apply to transportation to and from the site of operations); and
 - (vi) Powerline or pipeline patrol;
 - (5) Sightseeing flights conducted in hot air balloons;
- (6) Nonstop flights conducted within a 25-statute-mile radius of the airport of takeoff carrying persons or objects for the purpose of conducting intentional parachute operations.

Thus, §119.1(e)(2) does acknowledge hot air balloon scenic tours as legitimate commercial operations but does not require compliance with 14 CFR Parts 135 and 121. Indeed, there is no obligation for hot air balloon scenic tour operators to submit to any reporting to the FAA or formalized FAA oversight despite the industry's carriage of thousands of citizens annually. It is only through §91:147 that the FAA can accumulate data on this sector of aviation.

If the recommended change to §91:147 is ultimately adopted, issuance of the Letter of Authorization can be executed through the OPSS system by local FSDO personnel and should require acceptable workforce energy and time.

Likewise, "on scene" oversight and inspections by Aviation Safety Inspectors may be incorporated in an Inspector's work program with modest impact. Whether an amended §91:147 as suggested requires a complete NPRM process or a streamlined procedure, such is to be determined by Washington.

ANTICIPATED INDUSTRY REPONSE

As a generality, balloonists are independent minded. As such, it can be anticipated that local, regional, and national balloon clubs and organizations may have concerns that the FAA intends to restrict its freedoms and impose onerous requirements. Ballooning has prided itself on "self-regulation."

Why now? The FAA must be successful in advancing its cause: that its primary role is to protect the public. Until now, this segment of the industry has not been subject to much FAA scrutiny. However, in consideration of the high percentage of commercial operator accidents and the very fact that many commercial hot air balloon scenic tour operators transport more passengers than some large FAR 135 operators, it is right and proper for the FAA to turn its attention to this sector of the industry.

What about aircraft limits? There will be debate about size of basket; gas versus hot air; etc. Consider that §91:147 applies to operators of Cessna 172's, Cessna 206's; Caravans; Twin Otters; Bell 430 helicopters; Piper Navajo's. In short, size of aircraft and hauling capability should not matter. Whether one patron pays for a scenic flight or twenty, the rule applies to all operators and rightfully so.

What about blimps, parachutes, etc? Tour operations conducted in these aircraft are miniscule compared to the thousands of passengers flown annually in hot air balloons.

What about the requirement for drug and alcohol testing? Considering that commercial balloon pilots fly up to two dozen passengers (depending upon balloon size), these airmen should be subject to the same requirements

imposed on airplane and helicopter air tour pilots. However, this requirement may be a source of contention for the balloon ride industry. Nonetheless, enrollment in a drug testing consortium is not exceptionally expensive or intrusive.

Why the need for informing the FAA of an insurance carrier? A proposed LOA requirement for all scenic tour operators is to provide information regarding insurance coverage. In essence, this requirement demonstrates a minimal level of "economic authority." In light of the public's faith in a scenic tour operator that any injuries sustained will be covered by insurance to offset medical expenses if required, it is essential that the operator represent to the FAA that a legitimate insurance carrier is contracted for the protection of the patrons. Unfortunately, some operators have devised schemes that eliminate or mitigate liability.

Although a case can be made for new requirements imposed on commercial hot air balloon scenic tour operators for approved training programs, periodic pilot proficiency checking, and the development of written passenger handling and operations procedures, these are not goals of the initiative. The intent of incorporating such operators within the framework of §91:147 is, at the very least, to develop an accurate perspective of this industry. A byproduct of this requirement is some level of "safety assurance" that the multitudes of flyers that get airborne annually in a hot air balloon for a fee do so at reduced risk because the FAA is monitoring the companies, pilots, and systems that fly them.

RULE PROMOTION

Balloon Life and Ballooning Magazine are two prominent publications that could serve as vehicles for a press release to promote any rule change. Additionally, engaging the Balloon Federation of America (BFA) for its input and support will undoubtedly result in timely communication to its members of any proposal to include commercial balloon operators within §91:147.

With respect to the BFA, its "Commercial Operators' Division" has been formed recently. The group should best be consulted for a collaborative approach to achieving the FAA's goals of enhanced awareness and safety.

This paper developed by Wayne E. Phillips, AGL-230D; 734-487-7306