Commercial Space Transportation Safety Approval

Safety Approval Number: SA 13-005

Black Sky Training, Inc. is issued a safety approval, subject to the provisions of 51 USC Subtitle V, chapter 509, and the orders, rules, and regulations issued under it.

This safety approval is issued to Black Sky Training for its ability to provide as a service, scenario based physiology altitude training, which includes hypobaric chamber training for crew and space flight participants.

This safety approval is granted subject to the terms, conditions, and limitations set forth in safety approval order A and any subsequent orders issued by the Office of Commercial Space Transportation.

The holder of this safety approval must at all times comply with the regulations prescribed by the Office of Commercial Space Transportation relating to this Safety Approval.

Issued On: March 28, 2013
Effective On: March 28, 2013

Kenneth Wong
Manager, Licensing & Evaluation Division
OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
SAFETY APPROVAL ORDER REGARDING

Scenario Based Physiology Altitude Training

SAFETY APPROVAL NO. SA 13-005
ISSUED TO

BLACK SKY TRAINING, Inc.

1. Authority: This Order is issued to Black Sky Training, Inc. (BST) under 51 U.S.C. Subtitle V, chapter 509.

2. Purpose: This Order modifies Safety Approval No. SA 13-005 issued concurrently by the Federal Aviation Administration’s (FAA) Office of Commercial Space Transportation (AST). This Order prescribes as conditions to the Safety Approval certain requirements applicable to the approved safety element.

3. Scope: The safety element is a service that BST provides for training of physiological effects of high altitude environments. It includes classroom and hypobaric chamber training for crew and space flight participants to experience and demonstrate knowledge of the following through testing:

   1. Understand fundamental principles of the atmosphere and how it relates to the human body.
   2. Understand the fundamentals of respiratory physiology and how it relates to hypoxia.
   3. Show competence in the identification of the many different symptoms and physical signs of hypoxia.
   4. Show advanced competence in the phenomena of neurological impairment (time of useful consciousness) due to hypoxia.
   5. Understand the effects of prolonged oxygen use.
   6. Understand the difference between decompression illness and hypoxia.
7. Demonstrate using different scenarios, the difference between slow decompression and rapid decompression.

8. Identify personal symptoms of hypoxia and demonstrate donning of oxygen mask and ability to perform within a hypobaric chamber.

4. Crew and Space Flight Participant Training: BST may offer its scenario based physiology altitude training as a service to a prospective launch or reentry operator to meet the applicable crew and space flight participant training requirements of 14 CFR § 460.5(a),(b) and 14 CFR § 460.51.

5. Safety Approval Term: Safety Approval No. SA 13-005 expires in 5 years from the effective date of the Safety Approval.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: Kenneth Wong, Manager
Licensing & Evaluation Division

Issued: March 28, 2013
Effective: March 28, 2013