Smoke filled the cabin as flames shot across the ceiling of the aircraft. Firefighter Chris Brasure and his partner forced open the cockpit door and charged inside with a fire hose.

The temperature inside the aircraft had soared to 900 degrees, but it didn’t slow the NASA Wallops Flight Facility, Fire Department (WFD) firefighters as they doused the fire before it erupted into a fuel-charged inferno.

Fortunately, the aircraft fire was only a drill, though the flames and smoke were very real.

There was no fuel to explode this day, but Brasure and other Wallops firefighters gained valuable experience with diverting a potential disaster, courtesy of the the State of Virginia’s $1.2 million aircraft rescue and firefighting trainer that recently was brought to Wallops for a week.

“This is what we could encounter on any day,” said Brasure, a two-year veteran of the Wallops firefighting force. “You hope it never does happen, but it might. This is the time to get comfortable with it before there’s a fire.”

The simulator training was part of a 48-hour college-accredited course including 32 hours of classroom instruction that was provided to newer firefighters. Experienced personnel also reviewed drills in the simulator.

According to WFD Captain, David Kulley, the training was vital because of the nature of activities at Wallops.

“We don’t run a lot of calls, but the potential here is real,” said Kulley, noting the Facility’s importance as an aircraft-testing location.

“Anytime a plane lands or takes off, we have to have a truck on the field, just in case,” he said.

“Changing technology is a major reason for ongoing training,” said Robert Hill, a 10-year veteran WFD firefighter and emergency medical technician (EMT).

In addition, aircraft are constantly changing, requiring different methods of fighting fires that may occur in the various engine compartments. The trainer can be configured to resemble any type of plane. On this day, it was set up like a DC-9 aircraft.

Fires can be simulated in the wheel well of an aircraft, the engine, the interior or the exterior of a plane. A computer controls the intensity of fire and smoke with sensors at various levels inside the plane. If the heat becomes too intense, or a firefighter has difficulty with the task, the operator will send a computer command immediately stopping the flames and smoke.

Classroom instruction was provided by Terry Gwaltney, WFD. Simulator training was provided by Keith Whitlow, a Roanoke, Va., airport firefighter, and Ed Mann, a Richmond, Va., airport firefighter.

The trainer is a computer controlled system that simulates realistic aircraft fire and emergency scenarios. The mobile unit travels throughout Virginia delivering on-site training. This is the fourth time the unit has been to Wallops.

Wallops firefighters prepare to enter the aircraft simulator.

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Wallop Shorts Launches

A NASA Terrier-Black Brant sounding rocket was successfully launched from White Sands Missile Range, N.M. on December 16. The mission was to continue investigation of the relationship between the far-ultraviolet scattering and extinction properties of dust and molecular hydrogen. Dr. Paul Feldman, Johns Hopkins University, was the principal investigator. Good science was obtained. Gordon Marsh, NSROC, was the mission manager.

A 39.57 million cubic foot NASA scientific balloon was launched from McMurdo Station, Antarctica, on December 17. The Trans-Iron Galactic Element Recorder (TIGER) was the primary instrument in the gondola. The Antarctic Impulsive Transient Antenna (ANITA) was the secondary instrument. The TIGER instrument was to measure the elemental abundances and nucleosynthesis of nuclei. TIGER also studied galactic cosmic ray acceleration effects.

The ANITA instrument measured radio emissions over a frequency range where radio pulses from high-energy neutrino interactions deep within the Antarctic ice sheet are believed to occur. This flight was to establish the baseline background levels for a second flight.

Dr. Robert Binns, Washington University, is the principal investigator for TIGER. Dr. Peter Gorham, University of Hawaii, is the principal investigator for ANITA.

Total flight time was more than 18 days. Recovery efforts are underway at this time.

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In the Field

Wallops personnel are in Svalbard, Norway, preparing for the launch of a Black Brant X sounding rocket and at the White Sands Missile Range, N.M., preparing for the launch of a Terrier-Black Brant sounding rocket.

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Wallops In the News

The Cost of Personal Injury Accidents
by Mike Vandeveer
Computer Sciences Corporation
Occupational Safety and Health Branch

Often when an accident occurs, the initial cost of the accident may be very obvious — loss of life, or someone lost a foot, hand or a finger. Beyond the immediate "cost" is all the "hidden" cost of an accident.

If the event requires treatment at a medical facility there are the costs associated with maintaining the facility, the staff, the training, and the materials used as a direct result of the accident. Other costs include, ambulance, first responder, training, and maintenance. The Wallops Health Unit not only is involved in the treatment of emergencies, they have several other duties. Being available to treat emergency incidents is a hidden cost of accidents.

There also is a loss in productivity. When an accident occurs, there is the direct loss of the individual involved and the additional lost time of co-workers. Accidents disrupt production. Almost with out fail, work around the accident site will stop. Fellow workers will respond to the immediate needs of the victim. First aid, comfort and consoling, and natural human curiosity draw from productivity.

If the accident involves lost workdays, there is loss of productivity. An individual may need training to replace the lost worker, either as a temporary or permanent measure. If a permanent replacement is required, the cost of a "new hire" must be considered. This hidden cost can be very expensive.

All employers pay for workman’s compensation insurance. The cost is based on several factors one of which is the number of accident occurrences. The higher the number of accident incidents, the higher the rate for the insurance. Not a great deal different from your automobile accident experience.

The employer may pass on these costs to the employee in the form of more direct cost for health insurance, or smaller annual raises, or reductions in labor force. In some workman’s compensation cases there are legal and additional medical cost for rehabilitation, physical and/or occupational therapy and retraining for new job opportunities for the victim.

Mishap and accident investigations have administrative and manpower cost, space and admin staff support cost. The public’s perception of our conduct as a responsible agent of the Government is a hidden cost that cannot be evaluated.

Are practices and procedures subject to change? Were all safety requirements met? Will there be continued investigations from State and/or Federal agencies that may result in fines and penalties? Can the supervisor of the injured individual document all the required safety training, the job hazard analysis and personal protective equipment for the task being performed at the time? Were there “close calls” in the past that were ignored? Were adequate resources dedicated from upper level management to prevent this accident? Was safety and safety support requirements budgeted at adequate levels to have prevented this accident?

What of the “human cost” the pain and anguish suffered by the individual and the individual’s family, friends and associates. There is nothing worse than hearing the words of co-workers and witnesses at the accident site state, “I knew something like this was going to happen”.

There are very few “new” accidents. Wallops employees can prevent accidents. It just takes action.

“If you think the cost of education is expensive, consider the cost of ignorance,” said Dr. Bill Hargrove, chairman of the Contractors Safety Council.

The next time you knowingly fail to report a safety concern, consider the cost, we all have to pay. Thanks for thinking safety!

2004 Mentoring Program Orientation
January 13, 2004
9 a.m. to Noon
Building E-2 Training Room

All Wallops Civil Service Employees are invited to attend.

American Red Cross
Blood Drive — January 14
9 a.m. to 1 p.m.
Building F-3 (Rocket Club)

We are once again asking the Wallops community to roll up their sleeves and give the gift of life.

To schedule an appointment call the Health Unit on x1766.