Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2020 Minnesota
YEAR:	2020
STATE:	Minnesota
SPRAY DATE:	5/29/2020
OWNER:	State of MN Contract
TAIL NUMBER:	Unknown
AIRCRAFT:	Air Tractor 402B
FORMULATION:	Btk
PILOT INFO:	Unknown
INCIDENT TYPE	: Threat
WEATHER:	Unknown
BASIC INFO:	Rural area west of Hokah, Minnesota in Houston County MN

#### NARRATIVE:

The Minnesota Department of Agriculture received a voice recorded citizen complaint on their Pesticide Duty Officer Complaint line on the morning of May 28. Within the voice recorded complaint, the citizen referenced our upcoming aerial operations for *Lymantria dispar* management scheduled to begin on Friday, May 29 in Houston County, MN. He was concerned about the aerial spray operation impacting his commercial bee keeping business, particularly killing his bees. He had learned about the upcoming MDA spray project from another bee keeping friend. The resident was not within the treatment block, however he was concerned hundreds of his hives were within the target application area. He felt he did not have adequate time to safeguard his bees. During the voice recorded message he stated that "if they (bees) get sprayed and die there is going to be a massive lawsuit that's going to be all over the news, or I'm going to be sitting out there, or I'll be on the news because I'll be the one who's arrested shooting planes out of the sky" He wanted immediate action. "or you're going to see things on the news." Agency personnel then notified local law enforcement and suspended flight operations.

#### CORRECTIVE ACTION:

When notified of the threatening message, the contracting officer for the project immediately notified the pilot and the decision was made to suspend operations while local law enforcement conducted its investigation. Local law enforcement interviewed the subject and determined the suspect was angry and agitated but assured Agency staff that there was no real threat to the operation as planned. The Agency followed through by also notifying the FBI and the Minneapolis FAA FSDO Agent. No further law enforcement action is expected. A discussion between the flight crew and government staff resulted in the resumption of flight operations. It is also recommended that Agency staff and its Cooperators review its public notification procedures for these missions as well. The decision to involve local law enforcement as soon as possible is to be commended. Threats of this nature should not be taken lightly and investigations could result in multiple criminal charges.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2019 Pennsylvania
YEAR:	2019
STATE:	Pennsylvania
SPRAY DATE:	5/16/2019
OWNER:	State of PA contract
TAIL NUMBER:	Unknown
AIRCRAFT:	Bell 206L
FORMULATION:	Foray 76B
PILOT INFO:	Unknown
INCIDENT TYPE:	Other
WEATHER:	Unknown
BASIC INFO:	KAVP, Wilke-Barre Scranton Int at 0935 during spraying contract.

#### NARRATIVE:

The incident occurred during a *Lymantria dispar* suppression operation being conducted by a contractor under the direct supervision of the PA BOF. Spray operations that day started at approximately 0600, this incident occurred at 0935. At 0934 the pilot of the suppression aircraft indicated that he would be departing the landing zone and heading to one of the spray blocks. At 0935 a rotary aircraft was heard by BOF personnel acting as landing zone security, shortly after the black helicopter was spotted moving at high speed and low altitude {estimate 200-300 ft} and on course to fly directly over the landing zone. Upon seeing the incoming aircraft, the personnel acting as security radioed the suppression aircraft that a helicopter was about to cross over the LZ to prevent the suppression aircraft from departing for the spray block. Once the unknown aircraft cleared the landing zone, the suppression aircraft departed to continue spray operations. It was later determined through discussion with the pilot of the suppression aircraft that he had been made aware of the incoming helicopter by ATC at the nearby airport. Ground personnel not having connection to ATC were unaware that the suppression pilot had been informed of the incoming helicopter.

CORRECTIVE ACTION: No corrective action required. Robert Lusk, Forester PA Bureau of Forestry, Division of Forest Health is to be commended for his situational awareness and alertness in communicating to the spray pilot via portable radio that a non-spray helicopter was about to overfly the landing zone that the contracted spray aircraft was preparing to depart from. Good use of communication and not assuming that the pilot is aware of the traffic. Even though this spray happened within controlled airspace {Class D}, accidents concerning not de-conflicting aircraft can happen. Good use of NOTAMS and briefing with the airport manager. As another tool to de-conflict the airspace, discuss with the airport manager if there is {ATIS} Automatic Terminal Information Systems available to incoming and outgoing air traffic. Here is where airspace safety can define where the spraying is happening in relation to the airport, the times of operation, and finally the altitude in which it will occur. Overall job well done. Fly what you brief.... Brief what you fly....

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2015 Pennsylvania
YEAR:	2015
STATE:	Pennsylvania
SPRAY DATE:	5/14/2015
OWNER:	Unknown
TAIL NUMBER:	Unknown
AIRCRAFT:	Bell UH1
FORMULATION	: Unknown
PILOT INFO:	Unknown
INCIDENT TYPE	: Other
WEATHER:	45F, relative humidity 78%, winds 0 to 3 mph
BASIC INFO:	Near UAS incident: The block monitor talked with resident and resident decided not to fly drone in spray area.

#### NARRATIVE:

On Thursday 05/14/2015, the Project Coordinator was located in spray block which includes access to an adjacent block. About 7:15 a.m. a local resident drove by my vehicle and then turned around and came back to talk to me. He asked if it was turkey season and said that he did not want to bother hunters by flying his drone. I told him that I was glad we talked, because we were currently spraying that location. While we were talking, the pilot for was spraying the adjacent block. The resident mentioned that he didnt know that we were spraying or that there was a helicopter in the vicinity. We could hear the helicopter nearby as the pilot made his turns while spraying the adjacent block. He said that he routinely traveled to state forest lands to fly the drone to avoid the problems that he encountered during flights in town. He stated that he was glad that he stopped to talk because he could have continued down the road, close to or into the active block, to fly his drone. The resident then left the spray area. At the agency projects pre-spray safety briefing at 14:00 on 05/12/2015, procedures for dealing with reporting UAS activity were discussed and reviewed. All Forest District Block Monitors and staff in the Division of Forest Health were briefed to be aware of UAS activity, how to report UAS activity, and what operations would take place if a UAS was active in our airspace during operations. Reporting procedures were developed previously as part of the extensive planning process. The FS Aviation Officer, who was also at this meeting, also commented on the UAS issue and our procedures during the safety briefing. Summary of log notes during the first few hours of operation: On 05/14/2015, the first day of operations, I was located at Landing Zone {{{{}}} at the local County Airport to observe flight operations. One of the helicopters began operations at the local County Airport with powerplant turned on at 05:48. After a radio check, fueling, and loading insecticide, liftoff was at 06:01. First block to be treated was identified near the airport. The pilot completed block SCSF102 at 06:26 and headed to State Forest spray block SCSF101. Pilot started spraying SCSF101 at 06:28. Pilot completed Load 1 at 06:40 and returned to the airport to reload. Helicopter landed at airport at 06:45. Helicopter lifted off again at 06:55 to return with Load 2 of the day to SCSF101. At 07:00 the pilot radioed back to the dispatcher that there was a logging operation and equipment moving in the block. Ground monitors for the Forest District radioed that the operators know about the spray operation. Pilot resumed treatment in SCSF101. Weather in spray block SCSF101 at 07:12 was: temperature 45 degrees F, relative humidity 78{{{{}}}, and winds were 0 to 3 mph. Pilot finished spraving Load 2 in SCSF101 and completed the block at 07:31 and returned to the airport to reload. Next treatment block was SCSG103. Helicopter landed at airport at 07:36. At approximately 09:00, the block monitor who visited with the UAS operator arrived at the airport and informed me of his encounter with a local citizen who was going to fly a UAS in SCSF101. I asked him to record his encounter in writing and that I would discuss the issue with my aviation officer. After informing USDA Forest Service Aviation Officer, the FS aviation officer met us on location to discuss the situation later in the day. It was decided that filing a SAFECOM would be an appropriate course of action so that others who might experience such an event would have an idea how to deal with the situation.

### CORRECTIVE ACTION

Good work to include potential UAS mitigation/reporting in pre-op briefing, avert the conflict in the field, and document using the SAFECOM procedure. The immediate heads-up communication to FHP NASM and spray personnel after intervention was greatly appreciated and shared. All aviation users need to be informed of increasing activity as it occurs, take note of the care that this state agency took in raising UAS awareness and effectiveness of the mitigation. Well done! The Forest Service Aviation Officer assessed the situation from beginning to mitigation and was pleased at the fact that during the pre-operations briefing, all involved in the huge project would be familiar with the procedures in handling such a situation. The mitigation of risk was handled in an exemplary manner by the state and that there was no confrontational communications between the UAS operator and the state official. This event required professionalism, good preplanning, and implementation of mitigating the risk, followed by a very detailed and well informed After Action Report.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2013 Pennsylvania
YEAR:	2013
STATE:	Pennsylvania
SPRAY DATE:	5/19/2013
OWNER:	Helicopter Applicators, Inc/Martin
TAIL NUMBER:	N654HA
AIRCRAFT:	Helicopter Bell OH58
FORMULATION:	Foray 76B
PILOT INFO:	Don Gembe
INCIDENT TYPE	: Other
WEATHER:	
BASIC INFO:	A fixed wing aircraft was conducting treatments over adjacent blocks; unable to make radio contact with pilot.

#### NARRATIVE:

Just as the helicopter (Tail #N654HA), piloted by Don Gembe, was lifting off from LZ2 (see attached maps) with its fifth load of the morning at 07:20, a Bureau of Forestry Block Monitor, Mark Bodamer, on the south side of Spray Blocks VESG107 and CLSG108 radioed-in to the DNCR Bureau of Forestry dispatcher, Sharon Coons, at LZ2 that a fixed-wing aircraft had begun treatment just south of the two treatment blocks that N654HA was returning to and was flying a north/south pattern and making turns over our two spray blocks. Our helicopter had begun treatments at 05:31 on May 19 in Spray Block #VESG107 and was flying a north/south pattern and was working from the west side of the block toward the east side of the block. The Block Monitor stated that the helicopter-turns would also fly over the area the fixed-wing aircraft was spraying. The dispatcher immediately radioed the pilot to inform him of the fixed-wing aircraft. Don Gembe acknowledged that he saw the aircraft as he approached the spray blocks and would avoid turns over the fixed-wing aircraft's flight lines and would maintain visual contact with the other aircraft was being operated by John Tallman Aerial Spraying and piloted by Trennis Vaughn. Don Eggen called our project's airspace coordinator, Gary Jewett, at 07:25 to determine if he knew whether or not one of Tallman's aircraft was scheduled to be flying in our area on May 19th. Gary called back at 07:33 and said he could not find any NOTAMs posted for that area other than the NOTAM he had posted for our LZ Group 2 set of blocks.

#### CORRECTIVE ACTION:

Prior to spray operations, DCNR Bureau of Forestry staff had contacted several private applicators that would be working in the areas of Pennsylvania that would be treated in our program. An air-to-air frequency was set at 123.05 so that pilots could communicate with one another. After flight operations for the day, Don Eggen talked to Don Gembe about the situation and he also called John Tallman to confirm the other aircraft was working with him. The turbo thrush (Tail #N70143) was being flown by Trennis Vaughn and he had attempted to radio Don Gembe. Don Gembe was not told of the radio frequency we had decided upon and he had tried several frequencies in an attempt to contact Trennis Vaughn. The pilots visually worked out their air space and kept separation between the two treatments. There were no close calls or incidents, and the blocks were completed in the LZ Group by 09:30. All four pilots in the state spray program were contacted on May 19 to be sure they have the radio frequency. In addition, communications between John Tallman and DCNR Bureau of Forestry staff is being maintained. John Tallman has told us where his spray blocks are located, and Bureau of Forestry staff have sent Tallman more detailed maps of our spray blocks and LZ Groups. Communications will continue throughout the program to determine dates, times and locations where Tallman's aircraft will be treating. In addition, we have provided the cell phone and e-mail address of Gary Jewett, our airspace coordinator, to John Tallman so that he can keep Gary informed of where he is spraying.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2010 Illinois
YEAR:	2010
STATE:	Illinois
SPRAY DATE:	5/20/2010
OWNER:	Hendrickson Flying Srvice
TAIL NUMBER:	
AIRCRAFT:	Bell 47 - WASP Helicopter
FORMULATION:	Foray 76 B
PILOT INFO:	
INCIDENT TYPE:	Other
WEATHER:	Clear; Calm; Cool
BASIC INFO:	Helicopter tried to take-off with load hose still attached.

#### NARRATIVE:

Helicopter started to take-off, felt the resistance and cut power. Meanwhile the load crew was in a wrestling match (with) the helicopter ... Trying to get the hose detached. He lost.

We shut-down for 15 minutes. The company ops leader, both pilots, ground crew, and I took a break and met. We decided that dispite any protests from the ground crew that "This was his job" a second person was needed to confirm "A Go" status for the pilots. Less trips back and forth to the helicopter would reduce confusion.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2010 Indiana
YEAR:	2010
STATE:	Indiana
SPRAY DATE:	4/28/2010
OWNER:	Garrett Eby
TAIL NUMBER:	N602GE
AIRCRAFT:	AirTractor 602
FORMULATION:	Foray 76B
PILOT INFO:	Garrett Eby
INCIDENT TYPE:	Other
WEATHER:	
BASIC INFO:	ircraft hit two pigeons during spray operations.

#### NARRATIVE:

Brief Narrative: At approximately 10:30 a.m. while spraying Foray 76Bt over the block Aboite 1 in the Ft. Wayne area, application aircraft hit two pigeons. No damage was observed to aircraft. Treatment Site Coordinator {TSC} montioring operations from the ground also saw the bird strike and immediately made radio contact with the pilot, confirming operations normal and giving notice to other aircraft. Operations continued uninterrupted and without further incident for approximately 30 minutes under the supervision of TSC.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2010 Indiana
YEAR:	2010
STATE:	Indiana
SPRAY DATE:	4/29/2010
OWNER:	Dave Eby
TAIL NUMBER:	
AIRCRAFT:	AirTractor 602
FORMULATION:	Foray 76B
PILOT INFO:	
INCIDENT TYPE:	Threat
WEATHER:	
BASIC INFO:	Freatment Site Observer approached by hostile individual and threat was made.

#### NARRATIVE:

Aboite 2 Treatment Site Observer {TSO} approached on the ground by hostile public. Individual demanded to know what the ""F-ing"" planes were doing spraying ""S..." all over his house. TSO informed him that the treatment was for *Lymantria dispar*, referenced press releases and post cards provided to the public. Individual stated he was about to shoot the ""F-ing" plane down. TSO informed of second treatment planned next week and to keep his gun away.

TSO completed an incident report the same day including location, vehicle and physical desriptions {blk Chevy Tahoe, squeaky brakes, exiting Rosewood Dr onto Aboite Center Rd, wht male upper 30s/lower 40s, dark hair}. IDNR State Entomologist, all project personnel and flight crews were made aware of the threat during regular post-mission briefing. State Ento instructed all as to seriousness of this threat and the need to follow up with law enforcement. Note: Homeland Security notified & Indiana DNR patroled area during subsiquent spraying. No reported interference

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2009 Indiana
YEAR:	2009
STATE:	Indiana
SPRAY DATE:	5/11/2009
OWNER:	Dave Eby
TAIL NUMBER:	N602GE
AIRCRAFT:	AT-602
FORMULATION:	Btk
PILOT INFO:	Garrett Eby
INCIDENT TYPE	: Other
WEATHER:	Clear
BASIC INFO:	GPS logging not operating on initial pass

#### NARRATIVE:

The logging switch is activated by the spray valve handle. Logging activation switch was calibrated using water and it worked fine. Viscosity of Bt is different than water requiring the reduction of the spray valve opening – as such the opening was not wide enough to activate the logging switch. The solution was to rotate the logging switch so it would be activated at the appropriate handle position. A screwdriver was needed. Diversion of flight path to land at Smith Field was necessary to adjust the logging switch to activate GPS logging.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2009 Indiana
YEAR:	2009
STATE:	Indiana
SPRAY DATE:	5/19/2009
OWNER:	Dave Eby
TAIL NUMBER:	N1148E
AIRCRAFT:	Champ
FORMULATION:	Btk
PILOT INFO:	Dennis Thornton (observation Pilot)
INCIDENT TYPE	: Other
WEATHER:	Clear
BASIC INFO:	Aircraft radios unusable

#### NARRATIVE:

Landing light of observation plane was left on while flying as observation plane. The breaker popped and the alternator was not charging the battery. Dennis Thornton radioed Garrett Eby to inform him that the aircraft radios would not be usable. Dennis Thornton was at all time in radio contact with pilots Garrett Eby, Ryan Eby, and ground observers via AgriFlite FM Radios on scan/direct channel. The occurrence happened at the end of the Arlington Treatment block. That airspace does not require aircraft radio contact.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2009 Maryland
YEAR:	2009
STATE:	Maryland
SPRAY DATE:	5/8/2009
OWNER:	Coastal Air Services, Inc.
TAIL NUMBER:	N53AG
AIRCRAFT:	UH-1H
FORMULATION:	Foray 48B
PILOT INFO:	Dan Riley
INCIDENT TYPE:	Ground Spill
WEATHER:	Clear, Calm, High Clouds
BASIC INFO:	Pump not working, dump valve accidentally opened.

### NARRATIVE:

Spray pump working intermittently. While working on the pump, the dump valve was accidentally opened, lost about 10 gallons on bare ground and contained with wood chips.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

		2009	Maryland
YEAR:	2009		
STATE:	Maryland		
SPRAY DATE:	5/13/2009		
OWNER:	Coastal Air Services, Inc.		
TAIL NUMBER:	N9111CE		
AIRCRAFT:	UH-1H		
FORMULATION:	Foray 48B		
PILOT INFO:	Lon Johnson		
INCIDENT TYPE:	Other		
WEATHER:	Sunny		
BASIC INFO:	Left spray boom came loose		

#### NARRATIVE:

Left spray boom came loose from one attachment point, hanging down. Pilot shut off pump, very little leakage. Pilots safely landed with assistance from ground crew.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2009 Pennsylvania	
YEAR:	2009
STATE:	Pennsylvania
SPRAY DATE:	5/18/2009
OWNER:	Helicopter Applicators, Inc.
TAIL NUMBER:	N4692Z
AIRCRAFT:	Bell 204UH1E
FORMULATION	: Foray 76B
PILOT INFO:	
INCIDENT TYPE	: Criminal Action
WEATHER:	Clear
BASIC INFO:	Pilot returned guarded switch to the correct position and ran through all preflight checklists. After ground- running the helicopter for 15 minutes and running through all preflight checklists again, pilot left airport LZ to begin treatment operations for the 5/18/09 AM session at 08:36. No further problems reported. Pilot contacted Mt. Pocono airport personnel on 5/19/09 to report the tampering incident. Pilot checked in with contractor and indicated no desire to take any further action.
NARRATIVE:	
Pilot unable to st	art halicenter. After reviewing checklists, pilot contacted Halicenter Applicators in order to diagnose possible cause(c) of the

Pilot unable to start helicopter. After reviewing checklists, pilot contacted Helicopter Applicators in order to diagnose possible cause(s) of the problem. After consultation, pilot discovered a guarded switch was tampered with on the helicopter and had been switched to an emergency position rather than the normal auto position. Pilot also discovered a few of the Micronair blades had also been tampered. Pilot reset to calibration specifications. Pilot and Bureau of Forestry staff learned of a model airplane event had occurred the evening before inside Mt. Pocono airport grounds in close proximity to contractor equipment, thus raising suspicion of the possible source of the tampering given that airport grounds are closed to unauthorized personnel behind a locked gate and fence. No witnesses were identified.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

### 2009 West Virginia

YEAR:	2009
STATE:	West Virginia
SPRAY DATE:	5/9/2009
OWNER:	Summit Helicopters
TAIL NUMBER:	N6344D
AIRCRAFT:	Bell 206 L4 with spray booms attac
FORMULATION:	
PILOT INFO:	Dextor Williams
INCIDENT TYPE	: Other
WEATHER:	Cloudy with light winds
BASIC INFO:	Spray Boom clipped the truck exhaust stack as helicopter was lifting off.

### NARRATIVE:

N6344D was lifting off the mix truck when a spray boom clipped the exhaust stack on the truck causing a slight pitch of the helicopter to the North side.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2009 West Virginia
YEAR:	2009
STATE:	West Virginia
SPRAY DATE:	5/11/2009
OWNER:	Summit Helicopters Inc.
TAIL NUMBER:	N/A
AIRCRAFT:	N/A
FORMULATION:	N/A
PILOT INFO:	N/A
INCIDENT TYPE	: Other
WEATHER:	Cloudy, dark morning
BASIC INFO:	Summit Helicopters Inc. Fuel Truck backed into a vehicle.

#### NARRATIVE:

Paul Lirrette of Summit Helicopters Inc. was traveling west bound on Route 50 and missed the north entrance to the LZ due to high grass around the entrance. He then backed up to enter the driveway and backed into a small car. The car was too close for him to see it in the rearview/side mirrors because of the dually rear tires and fenders. Insurance information was exchanged by parties involved. FACTOR (S) RELATING TO THIS INCIDENT

One factor was tall grass at LZ entrance. The vehicle was following too close making it in the truck's blind spot.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

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	2009 West Virginia		
١	/EAR:	2009	
5	STATE:	West Virginia	
5	SPRAY DATE:	5/11/2009	
C	OWNER:	Summit Helicopter	
٦	TAIL NUMBER:	N5744Y	
4	AIRCRAFT:	Helicopter	
F	ORMULATION:	Dimilin 4L	
F	PILOT INFO:	Tom Hanks	
I	NCIDENT TYPE	: Other	
V	VEATHER:	partly cloudy, 50 degrees with winds at 2 miles per hour	
E		Summit Helicopter wing number N5744Y was in close proximity to an AmeriGas propane truck. Two WVDA personnel at LZ#1 witnessed the incident. They were Tom Pownall (site supervisor) and Tyler Hern (mixing and loading officer).	

#### NARRATIVE:

The loading truck was parked beside a fence that ran along the driveway of the property we were using as an LZ. This was the only level spot at the LZ. When aircraft # N57447 landed, the aircraft's tail rotor was directly above the driveway. At approximately 8:05 am, aircraft # N57447 was re-fueling when a 2,500 gallon AmeriGas propane truck came up the driveway and stopped under the tail rotor. I exited my vehicle and motioned for the driver to pull up out of the way.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2009 West Virginia		
YEAR:	2009	
STATE:	West Virginia	
SPRAY DATE:	5/18/2009	
OWNER:	Summit Helicopters. Inc	
TAIL NUMBER:	773H	
AIRCRAFT:	Helicopter	
FORMULATION	: Foray 76B	
PILOT INFO:	Ron Jackson	
INCIDENT TYPE	: Other	
WEATHER:	Sunny and clear with light winds	
BASIC INFO:	West Virginia and Virginia spray contractors' treatment ( <i>Lymantria dispar</i> ) helicopters were spraying adjacent spray blocks on the West Virginia Virginia border without prior communication. Aircraft came in close proximity, dangerously sharing airspace	

### West Virginia, Virginia border without prior communication. Aircraft came in close proximity, dangerously sharing airspace.

NARRATIVE:

I was the observer for the WVDA on the morning of May 18, 2009 around 7:51am. The WV Spray aircraft, wing number 773H was headed to WV block, FS\_01's south end when we discovered the Virginia aircraft was already spraying VA block 355. At one point the Virginia aircraft was within a 100 yards.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2009 West Virginia		
YEAR:	2009	
STATE:	West Virginia	
SPRAY DATE:	5/19/2009	
OWNER:	Summit Helicopter	
TAIL NUMBER:	N5744Y	
AIRCRAFT:	Helicopter	
FORMULATION	: Dimilin 4L	
PILOT INFO:	Tom Hanks	
INCIDENT TYPE	: Other	
WEATHER:	Weather at the LZ #24 was partly cloudy, 41 degrees with winds at 4 miles per hour	
BASIC INFO:	The fuel hose was still attached to aircraft number N5744Y during take off. Two WVDA personnel were present during the near mishap. They were Tom Pownall (site supervisor) and Tyler Hern (mixing and loading officer).	

#### NARRATIVE:

At approximately 8:45am aircraft #N5744Y was taking on fuel at LZ#24, when the re-fueling was finished the aircraft proceeded to take off with the fuel hose still attached. The pilot (Tom Hanks) noticed this and immediately landed with no incident.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2009 West Virginia		
YEAR:	2009	
STATE:	West Virginia	
SPRAY DATE:	5/22/2009	
OWNER:	Summit Helicopter	
TAIL NUMBER:	N6344D	
AIRCRAFT:	Helicopter	
FORMULATION:	Foray 76B	
PILOT INFO:	Dexter Williams	
INCIDENT TYPE:	Other	
WEATHER:	Weather at the LZ #32 was partly cloudy, 67 degrees with winds at 0 -3 miles per hour	
	The fuel hose was still attached to aircraft number N6344D during take off. Two WVDA personnel were present during the near mishap. They were Jerry Judy (site supervisor) and Jeff Johnson (mixing and loading officer). Also on site were other personnel, including Amy Onken, representing USFS.	

#### NARRATIVE:

At approximately 10:20 am aircraft #N6344D was taking on fuel at LZ#32, aircraft had finished treating, and rinsed spray tank, ground crew was fueling aircraft for return to Summit headquarters, when the re-fueling was finished the aircraft proceeded to take off with the fuel hose still attached. Helicopter rose approximately 4 feet before the pilot (Dexter Williams) noticed this and immediately re-landed on top of the nurse truck. One ground crew member lost his balance while trying to unhook fuel nozzle and nearly fell off truck.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

		2008	Pennsylvania
YEAR:	2008		
STATE:	Pennsylvania		
SPRAY DATE:	5/20/2008		
OWNER:	Bruce's Flying Service, Inc.		
TAIL NUMBER:	N6136Z		
AIRCRAFT:	Ayres Thrush		
FORMULATION:	Foray 48B		
PILOT INFO:	Bruce Chisenhall		
INCIDENT TYPE:	Other		
WEATHER:			
BASIC INFO:			

#### NARRATIVE:

Contractor pilot for the 2008 PA Fixed-wing *Lymantria dispar* Suppression program was flying out of the Pocono Mountains Airport {KMPO} on a scheduled spray flight. Pilot, due to a lack of preflight planning, strayed into the Wilkes-Barre-Scranton Int. airport {KAVP} Class-D airspace at approximately 0730L. Flying at low-level, the aircraft entered the airspace without the pilot contacting approach or tower. He was flying purely by Sat-Loc GPS and dead reckoning to spray blocks supplied by the PA Bureau of Forestry personnel. A helicopter pilot operating on the suppression program and listening to the tower freq. overheard the AVP tower attempt to make contact with NXXX several times due to his proximity to two light jets on approach to the airport. The helicopter pilot contact his PA DCNR dispatcher over the VHF-FM frequency who in-turn relayed to incursion pilot's dispatcher, who eventually in-turn relayed to pilot over VHF-FM that the tower was attempting to contact him on their freq. Pilot also did not have VFR sectionals on-board to reference. Once in contact with the tower, he was queried by the approach corridor to Runway 4. NXXX was reportedly to have been given a heading away from the airspace, to which he responded "10-4". The tower controller additionally admonished him for not repeating the clearance or his call sign. The KAVP tower requested pilot contact them upon landing and as a formality this incident was passed on to the local FAA-FSDO {Allentown}.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2006 Illinois
YEAR:	2006
STATE:	Illinois
SPRAY DATE:	6/26/2006
OWNER:	Messenger Air LTD
TAIL NUMBER:	N4688Q
AIRCRAFT:	Cessna 210
FORMULATION:	Disrupt II
PILOT INFO:	Roger Messenger
INCIDENT TYPE	: Other
WEATHER:	Sky was mostly clear and the airport reported temperature was 70 and 20ft. Winds were
BASIC INFO:	The aircraft involved was a single engine 210 Cessna, with a retractable landing gear, tai Owner/operator of the Messenger Air LTD, 210 Cessna, failed to deploy the land gear du

**BASIC INFO:** The aircraft involved was a single engine 210 Cessna, with a retractable landing gear, tail number N4688Q. Roger Messenger, Owner/operator of the Messenger Air LTD, 210 Cessna, failed to deploy the land gear during a routine landing at the DeKalb Municipal Airport, in DeKalb, IL.

#### NARRATIVE:

Email from Mike Q:Michael D Quesinberry/R8/USDAFS 07/10/2006 11:46 AM To: Helen Butalla/NA/USDAFS@FSNOTES

Subject Aircraft incident

On June 26, 2006, while treating *Lymantria dispar* with pheromone "Disrupt II" an airplane incident occurred. The aircraft involved was a single engine 210 Cessna, with a retractable landing gear, tail number N4688Q. Roger Messenger, Owner/operator of the Messenger Air LTD, 210 Cessna, failed to deploy the land gear during a routine landing at the DeKalb Municipal Airport, in DeKalb, IL. There were no environmental conditions that hindered the pilot during landing. At the time of the incident, 12:06 central time, the sky was mostly clear and the airport reported temperature was 70 and the 20 ft. winds were steady out of the North at 6-8 MPH. There were no injuries to the pilot or other support personnel including FS employees. The plane came to rest approximately 600 feet from the initial point of impact to the runway and approximately 15 feet left of center-line. The propeller was severely damaged and unknown damage to the belly of the aircraft. The FAA released the aircraft to the pilot at 1400 hours and the plane was removed from the runway at 1506.

Dan Zimmerman, NA-Aviation Officer, Rick Howe, R9- Acting Aviation Officer and Dave Broadnax- R8 Aviation Officer were contacted immediately after the crash. 24, 48 and 72 hour reports were completed as per FS requirements.

If you need anything else give me a shout.

Michael Quesinberry USDA Forest Service Forest Health Protection 1580 North Franklin St., Suite 7 Christiansburg, VA 24073 PHONE:540-394-2515 FAX:540-394-2514 e-mail: mquesinberry@fs.fed.us

Email from Dan Zimmerman on 7/13/2006

Hello Helen,

I just faxed a copy of the SAFECOM of N4688Q, Cessna Centurion 210L, that experienced a mishap at the DeKalb Taylor Municipal Airport, DeKalb, IL on June 26, 2006. Mike mentioned that you had requested a fax of the SAFECOM and that he was having difficulty resurrecting the report from the database. So I just faxed it to your office fax (304-285-1508).

The incident occurred at 1206hrs, June 26 at the DeKalb Taylor Municipal Airport located in DeKalb, IL. The company, Messenger Air, Ltd., was subcontracted by Hatfield Spraying Services based in Nunica, MI. After a thorough investigation, eyewitness testimony and pilot's testimony; the incident is a human factors failure of the pilot in not following pre-landing checklist and executing the procedures for engaging the landing gear during final approach to Runway 2 of the airport. Results of not extending the landing gear was a bent 3-blade prop, damage to the undercarriage of the main fuselage, and possible damage to the engine which must be determined by further inspection and a run up with the prop and prop hub disassembled from the engine. The pilot was conducting a weather reconnaissance flight and was subcontracted as an observation pilot for the STS operation.

A complete report has been assembled as of today and must be submitted to the FAA nlt 30days from the incident. A copy of the report will be retained at the NTS office under aviation mishap files, a copy to R8 RAO, R9 RAO, and the FS National Aviation Safety Managers office in Boise.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

There were no fatalities, injuries, or damage to the airport. However, the aircraft received minimal damage but is grounded until engine checks and fuselage examinations are conducted. Then the pilot is issued a Ferrying Permit to fly the aircraft back to Ohio where its base is located in Ottawa for further repairs pending FAA approvals.

Mike Quesinberry, Rick Howe, and Dan Zimmerman were the primary investigators of the incident. If I can be of further assistance, please don't hesitate to call or email. Thx/Dan

Danny R. Zimmerman, MAS Area Aviation Officer Northeastern Area State & Private Forestry USDA-Forest Service

610.557.4147 (Office) 610.742.7860 (Cell) 610.557.4150 (Fax) dzimmerman@fs.fed.fs

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2006 Indian	а
YEAR:	2006	
STATE:	Indiana	
SPRAY DATE:	5/3/2006	
OWNER:	Agriflite Services Inc, David Eby	
TAIL NUMBER:	N4551L	
AIRCRAFT:	Air Tractor 402	
FORMULATION:	Foray 76B	
PILOT INFO:	David Eby	
INCIDENT TYPE:	Rotary Atomizer Malfunction	
WEATHER: S	See narrative.	
BASIC INFO: 4	Aircraft was in route from airport to treatment site and repo	rte

**BASIC INFO:** Aircraft was in route from airport to treatment site and reported vibration and returned to airport. Found blades had broken off two atomizers. Pilot initially thought it was problem with the pump.

#### NARRATIVE:

0622 Wheels up from Seymour airport. Sunny and calm winds, similar weather as that reported about from the treatment site.

0628 Pilot reports vibration with the aircraft and returns to Seymour airport. Pilot thought it may a problem with the pump.

At the time of the report, the aircraft was flying over rural farm land.

0635 Wheels down

0640 Examine aircraft

Blade came off of one atomizer which created the vibration and blew end caps off of the booms. Pilot thought that lose of the blades on one nozzle caused one blade on second nozzle to break off.

0650 Drove pilot to various stores to obtain repair supplies and returned to repair nozzles and spray boom.

0847 Ron Wolf arrived from Wakarusa with repair parts and supplies.

0900 wheels up from Seymour airport

0907 release of Btk at treatment site

0912 ground observer reports good spray pattern

0931 complete treatment at site

0940 approximately wheels down at Seymour Airport and download spray files

0945 approximately wheels up to return to Wakarusa

On left boom, inboard most atomizer lost all 3 blades. The left boom middle atomizer lost 1 blade. The blades broke off at atomizer housing leaving just the base of the blade in the housing. The inboard atomizer was replaced with another atomizer housing and blades but nozzle was not replaced. One blade was replaced on the middle atomizer. The end caps were replaced on the booms.

Aircraft had 125 gallons Foray 76B in the hopper at the time of wheels up at 0622. Upon return and containment of leaking Btk from the nozzle and booms, 95 gallons remained the tank. Estimate that 10 gallons spilled onto a gravel area just off the ramp, which was contained and cleaned up by the pilot. Believe the other gallons were lost in flight when the end caps blew off.

The pilot flew the aircraft from Wakarusa to Seymour the evening of May 2, 2006. During the flight, the blades on the atomizers were turned to minimize spin of the atomizer. The morning of May 3, the blades were turned to correct angle for application.

Atomizer nozzles are ASC Rotary atomizer.

Incident Reporter: Philip T. Marshall Forest Health Specialist Indiana Department of Natural Resources Division of Forestry Vallonia State Nursery 2782 W Co Rd 540 S Vallonia IN 47281 812-358-9034 or 3621

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2006 Indiana
YEAR:	2006
STATE:	Indiana
SPRAY DATE:	5/8/2006
OWNER:	Agriflite Services Inc, David Eby
TAIL NUMBER:	N4551L
AIRCRAFT:	Air Tractor 402
FORMULATION	Foray 76B
PILOT INFO:	David Eby
INCIDENT TYPE	: Rotary Atomizer Malfunction
WEATHER:	Weather was sunny and wind speeds were low and within application guidelines.
BASIC INFO:	Aircraft was returning to Wakarusa airfield from treating three sites and lost 2 blades on right wing inboard atomizer.

#### NARRATIVE:

0553 Wheels up Wakarusa

0617 Start application at Churubusco

0655 Complete application at Churubusco and fly to County Road 300S & 650W site

0700 Start application at County Road 300S & 650W site

- 0710 Complete application at County Road 300S & 650W site and fly to Ege North site
- 0717 Start application at Ege North site
- 0731 Complete application at Ege North site and return to Wakarusa airfield to reload.

0753 Wheels down Wakarusa

During return flight to Wakarusa airfield the right wing inboard atomizer lost two blades. Pilot believes that he let the airspeed get to high which may be involved in the blades breaking. Not sure of location when blades broke off, but the area between the last treatment site and the airfield was rural farmland.

The atomizer was replaced while reloading.

The blades on all atomizers on N4551L and N502S were replaced between May 3 and May 8 with new blades because of the failure of the blades on N4551L on May 3.

Incident Reporter:

Philip T. Marshall, Forest Health Specialist, Indiana Department of Natural Resources, Division of Forestry, Vallonia State Nursery, 2782 W Co Rd 540 S, Vallonia IN 47281 812-358-9034 or 3621

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2006 Indiana		
YEAR:	2006	
STATE:	Indiana	
SPRAY DATE:	5/8/2006	
OWNER:	Agriflite Services Inc, David Eby	
TAIL NUMBER:	N4551L	
AIRCRAFT:	Air Tractor 402	
FORMULATION:	Foray 76B	
PILOT INFO:	David Eby	
INCIDENT TYPE	: Rotary Atomizer Malfunction	
WEATHER:	Weather was sunny and wind speeds were low and within application guidelines.	
BASIC INFO:	Aircraft was treating the Osceola Elkhart site and lost blades on left inboard atomizer approximately one hour into the treatment period	
NARRATIVE:		

#### NARRATIVE:

1030 Wheels up Wakarusa

1034 Start application at Osceola Elkhart site

1132 Wheels down at Wakarusa to repair atomizer

1142 Wheels up Wakarusa

1146 Start application again at Osceola Elkhart site

1208 Complete application at Osceola Elkhart site

1210 Wheels down Wakarusa

During application to the Osceola Elkhart site lost blades on the left inboard atomizer. The site is urban/suburban. The blades on the atomizer were replaced and application continued. Not sure of cause for failure as do not know if it occurred during a turn or straight flight. The blades on all atomizers on N4551L and N502S were replaced between May 3 and May 8 with new blades because of the failure of the blades on N4551L on May 3.

This was second blade failure of the day for this aircraft. There were no failures during the remainder of application on May 8 and applications on May 9.

Atomizer is ASC brand.

Incident Reporter: Philip T. Marshall Forest Health Specialist Indiana Department of Natural Resources Division of Forestry Vallonia State Nursery 2782 W Co Rd 540 S Vallonia IN 47281 812-358-9034 or 3621

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

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2006 Indiana		
YEAR:	2006	
STATE:	Indiana	
SPRAY DATE:	5/17/2006	
OWNER:	Agriflite Services Inc, David Eby	
TAIL NUMBER:	N4551L	
AIRCRAFT:	Air Tractor 402	
FORMULATION	: Foray 76B	
PILOT INFO:	David Eby	
INCIDENT TYPE	: Rotary Atomizer Malfunction	
WEATHER:	Weather was sunny and wind speeds were 5-9 mph	
BASIC INFO:	Aircraft was treating the Osceola Elkhart site and lost blades on inboard and middle atomizer on right wing approximately 5 hours into the day's treatment schedule.	

#### NARRATIVE:

0552 Wheels up Wakarusa

0727 Wheels down at Wakarusa, completed application to Churubusco, County Road 600N & 350W and Ege North sites.

0820 Wheels up Wakarusa.

- 1005 Wheels down at Wakarusa, complete application to Huntertown South site
- 1015 Wheels up Wakarusa

1025 Start application at Osceola Elkhart site

1102 Report blade lost on atomizers on right wing

1106 Wheels down Wakarusa to repair atomizer

1124 Wheels up Wakarusa

1210 Complete application at Osceola Elkhart site

1216 Wheels down Wakarusa

During application to the Osceola Elkhart site lost a blade on two atomizers on right wing. The blades were lost over a urban/suburban site. The blades on the atomizer were replaced and application was completed. Not sure of cause for failure as do not know if it occurred during a turn or straight flight.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2006 Michigan
YEAR:	2006
STATE:	Michigan
SPRAY DATE:	5/17/2006
OWNER:	Frank Ousley
TAIL NUMBER:	N9026E
AIRCRAFT:	Turbine Weatherly
FORMULATION:	Foray 48B
PILOT INFO:	Frank Ousley
INCIDENT TYPE:	Nozzle Malfunction
WEATHER:	~60°F, Wind WSW @ 6 mph, Visibility 10 mi., mostly cloudy
BASIC INFO:	Brass valve cap fell off and broke rotary atomizer blade.

#### NARRATIVE:

At approximately 10:00 am pilot Frank Ousley returned to base within 20 minutes of taking off after noticing a vibration within the airplane. Upon landing, the atomizers were inspected and it was discovered that right-most atomizer was missing one blade altogether and another was halfgone. The cause of the broken blades was determined to be a brass nut that had fallen off the valve and flown back into the path of the blades, thus breaking them off. The blades were replaced and the pilot was back in the air within one hour.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2006 Pennsylvania
YEAR:	2006
STATE:	Pennsylvania
SPRAY DATE:	5/25/2006
OWNER:	AgRotors, Inc.
TAIL NUMBER:	N49718
AIRCRAFT:	Bell 206
FORMULATION:	Foray 76B
PILOT INFO:	Daniel Udisill
INCIDENT TYPE:	Criminal Action
WEATHER:	Not a factor.
BASIC INFO:	Aircraft vandalized overnight at Bear Creek LZ in Luzerne County

#### NARRATIVE:

On May 25th, Dan Rudisill (Subcontracted AgRotors Pilot) discovered that helicopter N49718 had been broken into and beer cans had been left in the cockpit. The aircraft had remained at LZ #10, located northeast of Bear Creek in Luzerne County, the following evening. This LZ was somewhat isolated but not secured by a lockable gate. Mr. Roy Wilt (Dispatcher) was instructed to have Mr. Rudisill inspect the aircraft and to note all instances of damage or possible tampering. After several phone conversations with Tim Marasco (Field Operations Section Supervisor), I communicated to Mr. Wilt that if the pilot felt that the aircraft was safe and airworthy, he could begin operations. Mr. Rudisill purged all fuel in the aircraft tank and replenished with clean fuel and completed inspection. Mr. Rudisill began operations following the inspection and fuel replenishment. Following this incident, Mr. Rudisill elected to ferry the aircraft to and from the LZ and overnight it at Wilkes Barre / Scranton Airport while operating in Luzerne County. Submitted by: Tim Marasco

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2006 Virginia

YEAR:	2006
STATE:	Virginia
SPRAY DATE:	6/9/2006
OWNER:	Orion Aviation
TAIL NUMBER:	N9032M
AIRCRAFT:	Cessna 210
FORMULATION:	
PILOT INFO:	John Estes
INCIDENT TYPE:	Emergency Landing
WEATHER:	Clear, sunny
BASIC INFO:	See SafeCom Report in Narrative

#### NARRATIVE:

Safecom Report: Tracking #: 06-0357 Date Submitted: 6/12/2006 10:47:00 AM

EVENT

Date: 6/9/2006 Local Time: 1507 Injuries: No Damage: No Location: Farmville State: Virginia Operational Control: Forest Service (USFS) > Region 08 Southern Area Region

MISSION

Type: Survey/Observation (Non-Fire) Other: Procurement: Other: Persons Onboard: 1 Special Use: Hazardous Materials: No Departure Point: Farmville, VA Destination: Farmville, VA

AIRCRAFT

Manufacturer: Cessna Model: 210

#### NARRATIVE

At 15:08, The pilot called on the radio that he smelled smoke in the cockpit and was coming back to the airport. He was conducting flight following for an application aircraft approximately 1 mile from the Farmville, VA airport. He landed safely at the airport at 15:08

#### CORRECTIVE ACTION

A mechanic on site found the source of the problem, a ground out starter. The starter was replaced and he flew back to his home base (Silar City, NC) and landed at 18:16.

Categories: Incident:Precautionary Landing

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2004 Virginia

YEAR:	2004
STATE:	Virginia
SPRAY DATE:	6/22/2004
OWNER:	Unknown
TAIL NUMBER:	N42801
AIRCRAFT:	Cessna 182L
FORMULATION:	
PILOT INFO:	John Amundson
INCIDENT TYPE:	Emergency Landing
WEATHER:	
BASIC INFO:	t 14:55 on Tuesday afternoon N4280

BASIC INFO: At 14:55 on Tuesday afternoon N42801 made a precautionary landing in a hayfield near the Check block in Franklin Co, VA. The pilot was in contact with and observed by spray pilot Rick Reed (N1025A) until he was safely on the ground. Roanoke tower was contacted prior to landing. FAA and JNF dispatch contacted immediately after the event.

#### NARRATIVE:

Report received from Donna Leonard:

June 22, 2004 Notes: Precautionary Landing in Franklin Co., VA

Pilot: John Amundson Aircraft: Cessna 182L, Tail # N42801 Location: Boones Mill, VA (37 02.93' and 80 00.11') USFS Contract No. 53-63A9-3-1 (Flake application contract for the STS project) Contracting Officer: Randy Lloyd, USFS, MN Shared Services Contracting Unit, Duluth MN COR: Donna Leonard, Entomologist, USFS Forest Health Protection, Asheville, NC

At 14:55 on Tuesday afternoon N42801 made a precautionary landing in a hayfield near the Check block in Franklin Co, VA. The pilot was in contact with and observed by spray pilot Rick Reed (N1025A) until he was safely on the ground. Roanoke tower was contacted prior to landing. FAA and JNF dispatch contacted immediately after the event.

Mary Sims (VDACS), Al Schiffer (contractor) and Eric Smith (FS LEO, JNF) were dispatched to the site with instructions to preserve the scene until further advice could be obtained from R8 Aviation Officer. Pilot had walked to the nearest house (Claude Green, 582 Retreat Rd, Boones Mill, VA, 540-483-4855) and was in contact with base via cell phone. State police and Channel 10 were also at site. LEO remained at site; others returned to base at 1830.

Rather than initiating an immediate stand down; each aircraft was allowed to finish their load prior to returning to base. Operations ceased by 16:30. R8 aviation officer (Broadnax) made contact with D. Leonard, the pilot and LEO at 19:00 and established the following:

1. The event was a reportable NTSB incident and had been reported as such through FAA

- 2. The aircraft had a factory installed engine with less than 1000 hours
- 3. Other than a bent propeller blade, there was no substantial damage to the aircraft

4. The pilot was not injured

Based upon this information, the R8 aviation officer gave verbal instructions as follows:

- 1.Until further notice the pilot was grounded and the aircraft and scene were to be preserved undisturbed
- 2. The remaining pilots/aircraft could return to duty at 0700 on Wed., June 23

3.SAFECOM to be submitted by 1000 on Wed

4.Pending contact with Ron Hanks the event was considered an incident

Wednesday:

- 1.SAFECOM submitted
- 2.Digital photos of aircraft provided to R8 aviation officer
- 3.Event classified as an incident
- 4.FAA released the aircraft to the contractor at 1000 and USFS followed soon after

5.Site and aircraft secured by LEO until contractor (JRA Executive Air) arrived to transport aircraft at 1000 on Thursday

6.Pilot allowed to resume duties on Thursday morning

/s/ Donna S. Leonard

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

The following statement was provided by John Amundson, pilot, Cessna 182L, N42801

On June 22, 2004, at approximately 14:50 while I was conducting safety / communication services for the spray aircraft working in the Check block, the engine began to lose power. I immediately checked the GPS for an airport at which to land. There were none within 10 miles. Then, I set up for an off-airport landing and looked for a suitable field. Most of the fields in the area had hay bales in them. There was a decent looking field just ahead and to the left and I chose it. While doing this, I was also trouble shooting the engine. I selected the left fuel tank, which seemed the fullest. I had previously applied full carburetor heat, which was the only thing that seemed to keep the engine running, albeit at reduced power. During this time I was being observed and was offered advice from other company aircraft, some of whom stayed with me until I was safely on the ground.

The field I selected was rather small but was aligned with the prevailing wind. I flew a circling, descending pattern, selecting full flaps when the landing was assured. The touchdown was on a slight uphill about 200 feet into the field. The ground was extremely rough, which caused me to bounce. Since the field was short (guessing approx 1,000 feet), I put the nose wheel down and applied maximum braking. This is probably when the propeller struck the ground and bent one of the blades about 15 degrees.

The aircraft stopped well short of the fence line. Since the engine was still running, I taxied a short distance to the fence gate. After relaying my GPS position to company aircraft (37 02.93' and 80 00.11'), I secured the aircraft. There appeared to be no other damage than the propeller.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	2003 Virginia
YEAR:	2003
STATE:	Virginia
SPRAY DATE:	6/28/2003
OWNER:	Al's Aerial Spraying
TAIL NUMBER:	N4506L
AIRCRAFT:	Air Tractor 400
FORMULATION:	Unknown
PILOT INFO:	John Tallman
INCIDENT TYPE	: Emergency Landing
WEATHER:	Unknown
BASIC INFO:	Forced emergency landing while treating for Lymantria dispar (possible engine failure).

#### NARRATIVE:

Preliminary Mishap Information from Donna Leonard - (Updated 6/28/03)

Project: Slow-the Spread (*Lymantria dispar*); Contract No.: 53-63A9-3-1 Contracting Officer: Randy Lloyd, R9, Superior NF, Duluth, MN COR: Donna Leonard, R8, S&PF, FHP (828-273-4324)

Date: Thursday, June 26, 2003 Time: Approximately 09:50 a.m. EST Location: Near the town of Narrows in Giles Co., VA (Near Blacksburg)

Contractor: Al's Aerial Spraying, Ovid, MI Aircraft: Air Tractor 400, N4506L Pilot: John Tallman Injuries: Chest bruising and soreness from harness; pilot was examined at the New River Valley Hospital and released at noon on June 26

Security: Mike Evans, Jefferson NF, LEO

Notes:

-Forced emergency landing while treating for Lymantria dispar (possible engine failure)

-Chase ship pilot John Amundson observed the incident and guided VA State Police Helicopter to the site where the pilot was picked up within 15 minutes of the incident and transported to the hospital. Chase pilot also guided spray block ground observer (Virginia Department of Agriculture employee) to the site within 20 minutes.

-Initial reports from chase pilot indicated minimal damage to aircraft as observed from the air (1000 ft above site). However, ground visits to the site revealed considerable damage to the aircraft (collapsed landing gear, propellers separated from aircraft nose, wing and frame damage).

-Fuel leaking from aircraft

-No pesticide leaks

-FAA, Giles Co. Sheriffs Dept., and 911 and notified and responded to the site

-FAA (Joe Fye, Charleston, WV) and FS investigators (Dennis Brown, R5 and Bill McMillan R8) visited the scene on 6/27.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

### 2003 West Virginia

YEAR:	2003
STATE:	West Virginia
SPRAY DATE:	6/23/2003
OWNER:	Northwoods Aviation, Cadillac, MI
TAIL NUMBER:	N2368G
AIRCRAFT:	Cessna 182S
FORMULATION:	
PILOT INFO:	Ray Hill
INCIDENT TYPE:	Emergency Landing
WEATHER:	

**BASIC INFO:** Shortly after take-off, the pilot reported engine running roughly. Returned to base 7 minutes after take-off. Further inspection revealed a stuck valve and bent rod.

#### NARRATIVE:

Safecom Report:

Name: Donna Leonard Organization: USDA Forest Service Address: PO Box 2680, Asheville, NC 28802 E- Mail Address: dleonard@fs.fed.us Phone: (828) 273-4324 Date 06/23/03

#### 2. EVENT

Date: 06/23/03 Local time: 11:47 Injuries? Y N Damage? Y N

Location: Mercer Co. airport, Bluefield WV State: WV

3. MISSION

Type: application chase ship

Procurement Cont No. 53-63A9-3-1

Pax, Cargo, Recon, Sling, Longline, etc.

Number of Persons: 1 Special Use? No Hazardous Material Onboard? No

Departure Point: Mercer Co. airport Destination: Mercer Co airport

#### 4. AIRCRAFT

(Reg.)N#: 2368G Manufacturer: Cessna Model: 182S Owner/Operator: Northwoods Aviation, Cadillac, MI Pilot: Ray Hill

5. NARRATIVE Provide a brief explanation of the event.

Shortly after take-off, the pilot reported engine running roughly. Returned to base 7 minutes after take-off. Further inspection revealed a stuck valve and bent rod.

Contract, CWN, Rental, Fleet, etc.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

### 6. CORRECTIVE ACTION

Current tach at 534.3 hours; 30.8 hrs past annual. Tim Kerns (A&P mechanic from Albatross Aviation, certified maintenance facility, Beckley, WV) replaced the cylinder on 6/24. Returned to svc 6/25

SEND TO: USDA Forest Service - Local Forest and Regional Aviation Safety Office in which the event took place.

U.S. Department of the Interior - Through Bureau channels to OAS safety Manager, P.O. Box 15428, Boise, ID 83715-5428 or Electronically through SAFETYNET at (208) 387-5823 (8-1-N)

This form is used to report any condition, observance, maintenance problem, act or circumstance which has potential to cause an aviation-related mishap.

Coding: For use of Regional Aviation safety Manager. CAUSE PHASE OCCURRENCE

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

### 2002 West Virginia

YEAR:	2002
STATE:	West Virginia
SPRAY DATE:	5/12/2002
OWNER:	
TAIL NUMBER:	N503D
AIRCRAFT:	Air Tractor 503-A
FORMULATION	Dimilin
PILOT INFO:	Scott Peterson
INCIDENT TYPE	: Aerial Dump
WEATHER:	Overcast VFR flight conditions. Visibility of 10 miles. Winds 3 to 5 with gust to 8 mph.
BASIC INFO:	Aircraft N503D dumped 384 gallons of Dimilin (1/2 oz AI pergallon) spray material over a remote uninhabited area of Hardy County.

#### NARRATIVE:

Just after the first pass on block number 15, Scott attempted to make the turn to return back to the spray block and he said he hit a "down draft". At that point he felt he needed to dump the load in order to maintain control of the aircraft.

There were elevation changes in and around the block from 1,500 to 2,400 feet. There was no damage to the aircraft or pilot. Because the incident occurred in a remote area, there was no impact to humans or livestock.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

### 2002 West Virginia

YEAR:	2002
STATE:	West Virginia
SPRAY DATE:	5/19/2002
OWNER:	Maurice Quesnel
TAIL NUMBER:	N88MQ
AIRCRAFT:	Ayres Turbo Thrush S2R
FORMULATION	: Dimilin
PILOT INFO:	Kenneth E. Yegella
INCIDENT TYPE	: Crash
WEATHER:	Partly overcast VFR flight conditions. Visibility of 12+ miles. Winds 1-7 mph
BASIC INFO:	Fatal incident occurred at approximately 12:50pm involving aircraft N88MQ operated by Kenneth E. Yegella. The incident occurred near Jennings Randolph Lake on the Westernport Topo. The aircraft was owned by Maurice Quesnel.

#### NARRATIVE:

N88MQ had completed his first load of 290 gallons of Dimilin into block number 29. He had returned with his last load and was about halfway completed when the incident occurred. There were approximately 140 gallons of Dimilin on board.

There was a power line on the south end of the spray block. It is not known if N88MQ impacted the power lines or if they were a contributing factor in any way.

Email from Noel Schneeberger: Noel Schneeberger, 05/20/02 08:58 AM

To: Kathryn Maloney/NE/USDAFS@FSNOTES, John Nordin/NE/USDAFS@FSNOTES, Robert Mangold/WO/USDAFS@FSNOTES, Ken Knauer/NE/USDAFS@FSNOTES

cc: Daniel Twardus/NE/USDAFS@FSNOTES, John Hazel/NE/USDAFS@FSNOTES, Michael Connor/NE/USDAFS@FSNOTES, Dan Zimmerman/NE/USDAFS@FSNOTES, Thomas Hofacker/WO/USDAFS@FSNOTES Subject: N88MQ--aircraft accident on GM project in WV

I regret to inform you that there was a pilot fatality on the WV *Lymantria dispar* suppression project Sunday (May 19). The attached report from Butch Sayers, WV *Lymantria dispar* program manager, will give you the initial details. The accident occurred near Randolph Jennings Lake just south of Westerport, Maryland (extreme western MD). I spoke with Butch this morning and he provided the following update;

WV Lymantria dispar suppression project is shut down today. They may start up again tomorrow.
The contractor (Maurice's flying service), WV State Police and National Transportation Safety Board are investigating the accident today.

3. Project personnel suspect that the cause was a power line strike, HOWEVER this has NOT been confirmed. There is a power line to the south of the treatment area; project personnel and the pilot discussed the location of this power line before the treatments occurred and the pilot was reminded of the power line by project personnel during the treatment. We have left a message for Dan Zimmerman on his cell phone to please follow up with the details on this accident. I have asked the WV *Lymantria dispar* project manager to continue to send us updated reports on the accident.

#### Email from :Dan Zimmerman, 05/21/02 12:36 AM

To: George Brooks/NE/USDAFS@FSNOTES, John Hazel/NE/USDAFS@FSNOTES, John Nordin/NE/USDAFS@FSNOTES, Karen Mollander/NE/USDAFS@FSNOTES, Kathryn Maloney/NE/USDAFS@FSNOTES, Ken Knauer/NE/USDAFS@FSNOTES, Michael Prouty/NE/USDAFS@FSNOTES, Robin Morgan/NE/USDAFS@FSNOTES, Susan Lacy/NE/USDAFS@FSNOTES, Tony Kern/WO/USDAFS@FSNOTES, Samuel Stone/WO/USDAFS@FSNOTES, Barb Hall/WO/USDAFS@FSNOTES, jantipin@fs.fed.us, ken knauer@fs.fed.us, linda haenn@fs.fed.us, michelle frank@fs.fed.us, nmartin@fs.fed.us, noel schneeberger@fs.fed.us, Daniel Twardus/NE/USDAFS@FSNOTES, Bradley Onken/NE/USDAFS@FSNOTES, Marc Roberts/NE/USDAFS@FSNOTES, Rodney Whiteman/NE/USDAFS@FSNOTES, Bradley Onken/NE/USDAFS@FSNOTES, Amy Onken/NE/USDAFS@FSNOTES, Michael Connor/NE/USDAFS@FSNOTES, Robert Mangold/WO/USDAFS@FSNOTES, Jesus Cota/WO/USDAFS@FSNOTES, Tim McConnell/WO/USDAFS@FSNOTES

cc: Alan Zentz/NE/USDAFS@FSNOTES, Dan Zimmerman/NE/USDAFS@FSNOTES, George Brooks/NE/USDAFS@FSNOTES, Jan Polasky/NE/USDAFS@FSNOTES, Kathy M Greene/NE/USDAFS@FSNOTES, Linda Haenn/NE/USDAFS@FSNOTES, Lori Gordon/NE/USDAFS@FSNOTES, Malcolm Gramley/NE/USDAFS@FSNOTES, Melissa Frey/NE/USDAFS@FSNOTES, Randy Harrison/NE/USDAFS@FSNOTES, Thomas Brady/R9/USDAFS@FSNOTES, Stuart Bothwell/R9/USDAFS@FSNOTES, Nicholas S Greear/R9/USDAFS@FSNOTES, taccintel@aol.com, Dan Zimmerman/NE/USDAFS@FSNOTES SNOTES SNOTES Subject: 24hr Initial Brief - Aircraft Accident Report

24hr Initial Report - Aircraft Accident

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

At 1250hrs, May 19, 2002, an agricultural aircraft accident occurred near Jennings Randolph Reservoir, West Virginia, while spraying a *Lymantria dispar* spray block, fatally injuring pilot Kenneth Yegella, 57, of Florida. Ken was a high-time pilot operating an Ayers Turbo Thrush S2R-G10 aircraft for Maurice Flying Service based at Lake View, Michigan. Maurice Flying Service is contracted by West Virginia Department of Agriculture for spraying specific areas infested with gypsy moths. The pilot was familiar with the terrain and had sprayed several loads of pesticide material over the spray block prior to the time of the accident.

A 24-hour safety stand-down has been imposed as a safeguard providing all affiliated personnel time to rest and regroup. The state manager reported that an observation aircraft was spotting high above over the spray plane and was actively advising the spray pilot of aerial hazards. The observation plane played a key role throughout the spraying operations and remained over the crash site assisting emergency operations.

Investigators on site include representatives from the National Transportation Safety Board (NTSB), Federal Aviation Administration, USDA Forest Service, and the State of West Virginia. I am on site and will keep you informed and soon provide a 72-hr Expanded Brief as the investigation continues. A formal report of the findings will be on file at the NA Headquarters Office following the conclusion of the investigation. The NTSB will be developing a Preliminary Report, followed by a Factual Report, thereafter a Final Report, which will also be included in the Forest Service formal report.

Aviation Safety Communique and Topography Map illustrating area of crash site is attached below.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2001 West Virginia

YEAR:	2001
STATE:	West Virginia
SPRAY DATE:	5/5/2001
OWNER:	Maurice Quisnel
TAIL NUMBER:	N4224X
AIRCRAFT:	Thrush
FORMULATION:	Dimilin
PILOT INFO:	Jim Perrin
INCIDENT TYPE:	Criminal Action
WEATHER: p	partly cloudy, warm
BASIC INFO: F	Plane shot at

#### NARRATIVE:

While spraying a block the plane was struck twice by bullets from a large caliber gun, both bullets easily passed thru the leading edge of the left wing. Shot A passed thru the wing about 30 from the fuselage and passed thru the wing perpendicular to the line of flight but comes from the back, towards the front. Shot B passed thru the wing about 12' from the fuselage and passed thru the wing at about a 45 degree angle from bottom left to upper right (when facing direction of flight) and is almost perpendicular with the plane of the wing.

The county police were contacted, came to the airport, took pictures, got the facts, and were going to get with the state police to visit the area and investigate the incident. The police are going to notify the F.B.I.

Reported by John R. Omer

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

### 2000 Michigan

YEAR:	2000
STATE:	Michigan
SPRAY DATE:	5/14/2000
OWNER:	Al's Aerial Spraying
TAIL NUMBER:	N444AS
AIRCRAFT:	Air Tractor AT-400
FORMULATION	Btk
PILOT INFO:	AI Schiffer
INCIDENT TYPE	: Threat
WEATHER:	cool, partly cloudy, temp 97 degrees F, humidity $55\%$
BASIC INFO:	Someone shot at spray plane with a pellet gun.

#### NARRATIVE:

Incident Report: Allegan County May 14, 2000 Lymantria dispar Program.

#### 1.) Pre-incident:

Aerial application of BT was suspended at 9:30 AM on this date due to high winds. At 4:00PM the county coordinator (Kim Pearson), MDA Block Advisor (David Pasutti), and the contractor (Al Schiffer) meet to assess weather conditions. At 5:45 PM weather conditions (Wind and Humidity) improved and were within acceptable levels (Wind speed Measured at 8 MPH, Humidity 55%.) Spraying was resumed at 6:00 PM. The spray blocks in and around the town of Pullman were selected for spraying due to the presence of a school. The absence of children on this Sunday evening was the best window for spraying for the next 5 days. The contractor (Al Schiffer) was the pilot of this spray run.

#### 2.) 6:15 to 6:30 PM (estimated time of incident)

The contractor, while spraying digitized blocks north of Pullman felt and heard what he describes as "Flying into a swarm of large insects or the sound and feel of a hand full of gravel hitting your car". Mr. Schiffer continued his spray run, turning and making repeated passes. On two or three subsequent passes he felt the same contact on the aircraft. Knowing that something was very "odd", Mr. Schiffer marked the location on his work map.

#### 3.) 7:15 to 7:30 PM (estimated time)

Contractor AI Schiffer, having continued his spray run and finishing the dispensing of his pesticide load, returned to the Allegan County Airfield for more BT product. During re-loading Mr. Schiffer inspected his aircraft for possible bullet holes. Not finding any penetrating holes, Mr. Schiffer continued his pesticide applications.

#### 4.) 8:15 PM (estimated time)

MDA Block Advisor (David Pasutti) and county coordinator (Kim Pearson) received a phone call from Karen Schiffer (the contractor's wife) stating that the State Police had contacted her and wanted to have Al phone them. Kim Pearson phoned the Michigan State Police at (616) 637-2125 and spoke with Trooper Tom Tanczos. Trooper Tanczos provided Ms. Pearson with the following:

a) A Mr. Daryl Vanderheird contacted them and complained about low flying aircraft. Mr. Daryl threatened to shoot down the spray aircraft if it flew over his property again.

B) Mr. Vanderheid threatened to turn his dogs on the investigating trooper. The trooper responded that if that happened, he would have to shoot his dog in self-defense. Trooper Tanczos told Ms. Pearson the situation went down hill from there.

C) Trooper Tanczos gave Ms. Pearson Mr. Vanderheid's address and phone number (Daryl Vanderheid, 1001 56th Street, Pullman: Phone 236-5886) and asked Ms. Pearson to phone him and explain the counties spray program.

Ms. Pearson called Mr. Daryl Vanderheid, who said he was an organic grower and did not want pesticides to contaminate his crops. Ms. Pearson explained that the product used was a (BT) pesticide and that this product is often an acceptable organic gardening pest control. At the time, Ms. Pearson did not think that Mr. Vanderheid was included in the active spray block. The phone conversation was then ended with no indication that Mr. Vanderheid had fired shots at Al Schiffer's aircraft.

#### 5.) 8:25 PM (Estimated Time)

Al Schiffer returned from his second spray run. After hearing that the State Police had contacted his office, Mr. Schiffer and other personal closely inspected his aircraft. At this time, a City of Allegan police officer came to the airport and inspected the aircraft with the flight crew. Wing and tail flaps had numerous dents of a type that could be caused by shotgun pellets. The Allegan police officer contacted the State Police, and said that an officer would be out in 20 to 25 minutes. MDA Bock Advisor (David Pasutti) made phone contacts to Jan Ryan (Region 5 Coordinator) and Mike Hansen (Supervisor Region 5). Jan Ryan contacted Jim Johnson (State Coordinator) who later contacted MDA block advisor (David Pasutti) known information was relayed to Mr. Johnson. Mike Hansen contacted David Pasutti later in the evening after receiving message of the incident.

#### 6.) 9:15 PM (Estimate Time)

A County sheriff deputy arrived and inspected the damage aircraft. Mr. Schiffer elected to have the investigation continued by the Michigan State Police. The Allegan County Sheriff Deputy called the State police via radio, and left the airport. Kim Pearson, phoned her earlier contact (Trooper

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

Tom Tanczos) and reported to him that the aircraft had been damaged by shotgun pellets.

#### 7.) 10:30 PM (Estimated Time)

Michigan State Police investigating trooper (I do not have his name) arrived and obtained a description of the incident from contractor AI Schiffer. The Allegan County Sheriff Deputy (the same deputy that was present earlier) returned and was present during the questioning of Mr. Schiffer. The State Police investigating trooper shared some of his insight from the original contact with Mr. Vanderheid, inspected the damaged aircraft, and took photos. A request was made by the Trooper for a copy of GPS maps and it was decided that he would arrange for them to be obtained from Kim Pearson at the county building on the Monday May 15, 2000. When asked what will happen next, it was explained (by the Trooper) that the suspect would not be approached until more information was gathered from possible witnesses. The investigation will most likely take one to two weeks and the exact nature of charges will be determined after the State Police contact the FAA.

Communication from Kim Pearson, Allegan County

Allegan County

Lymantria dispar Program FROM: Kim Pearson 113 Chestnut Allegan County Allegan, Michigan 49010 Phone (616) 686-4518 Fax (616) 673-0303 E- mail: kpearson@accn.org

#### Attention: Carolyn Norton

My account of the events of May 14, 2000, pertaining to the alleged shots fired at Aircraft N444AS.

Albert Schiffer of Al's Spraying piloted the airplane. The planes original time of departure from the Allegan airport was 6:06 p.m. returning at 7:10 p.m. The plane was reloaded with fuel and product and departed again at 7:18 p.m. There was no indication of trouble given to me by the pilot at that time, although his ground crew later indicated he had examined his plane as if looking for damages: At approximately 8:00 p.m. the air service's cell phone rang. I answered the phone and it was Kathy Schiffer wanting me to get a message to Al from the Michigan State Police. I suggested that I call immediately to find out what it was pertaining to. I returned the call to Tom Tanczos on behalf of Al Schiffer. Officer Tom Tanczos relayed information regarding a complaint about the planes flying over a resident, Tom said, The resident's main complaint was that he's an organic farmer, and he was concerned about chemicals on his property. Tom said, The resident threatened to shoot the planes if they did not quit going over his property, and at that point officers had been to the resident's premise. I then asked if they had seen a gun; the report was negative. Officer Tanczos encouraged this idea saying the police had not been able to establish a good rapport with the resident. I calle the resident at (616)-236-5886; approximately 8:00 p.m. connecting with the resident's answering machine. I left a detailed message as to what we were using, Btk, that it would not jeopardize his status as an organic grower and we were sorry for any inconvenience or disturbance. I left my name and number if he had any questions.

My next indication of a problem was when Al Schiffer, the pilot, landed the plane at 8:30 p.m. and reported being hit by shots. This has been reported to 911 and the police were on their way.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

2000 Michigan		
YEAR:	2000	
STATE:	Michigan	
SPRAY DATE:	5/20/2000	
OWNER:	Hatfield Flying Service	
TAIL NUMBER:	N178RA	
AIRCRAFT:	Dromedere	
FORMULATION:	Bt	
PILOT INFO:	Ken Ferell	
INCIDENT TYPE:	Crash	
WEATHER:	Unknown	
	On May 20 (Saturday morning) at approximately 10:40 a.m. during a <i>Lymantria dispar</i> aerial pesticide (Bt) spraying operation, Muskegon County Coordinator's contracted aerial applicator, Hatfield Flying Service, experienced an accident involving one of Hatfield's fixed-wing ag spraying aircraft, fatally injuring pilot Ken Ferell.	

#### NARRATIVE:

Report 1

May 20, 2000 Initial Situation Report, Michigan's Lymantria dispar Aerial Applicator Aircraft Accident

On May 20 (Saturday morning) at approximately 10:40 a.m. during a *Lymantria dispar* aerial pesticide (Bt) spraying operation, Muskegon County Coordinator's contracted aerial applicator, Hatfield Flying Service, experienced an accident involving one of Hatfield's fixed-wing ag spraying aircraft, fatally injuring pilot Ken Ferell.

Initial information being provided by onsite personnel report that the aircraft was flying in perfect conditions within the application window for applying the pesticide Bt. Treatment was taking place in a wooded area described as nearby a residential area. The spray aircraft had applied numerous loads of pesticide since 0600hrs on the morning of the accident without any problems. A witness reported that as the pilot positioned the aircraft to begin spraying, two very loud bangs were heard and fire broke out in the engine as the plane continued to lose altitude and one side of the wing struck the tree canopy, impacted the ground in flames. It is not known if the plane, or any part of the plane was on fire before impact or afterwards.

At the time of the accident, three planes were conducting aerial spraying in other blocks since 0600hrs with two observation planes monitoring the airspace, warning of aerial obstacles as towers and wires, and monitoring the spraying. As both observation planes were positioned at much higher altitudes monitoring two spray planes, one of these observation pilots noted a pillar of smoke billowing up through the forest canopy in the approximate area where the third application plane was conducting spraying operations. The observation plane reported the accident back to the Airport as local citizens also reported the accident to 911. Within 5 to 7 minutes, the local fire company firefighters and EMTs were at the scene. Dwight Scarborough, NA St. Paul Field Office Project Technical Assistant, also arrived onsite as fire suppression operations were taking place, security being established, and emergency procedures were being implemented. Jim Johnson, Michigan *Lymantria dispar* Program Manager has also arrived and implemented his safety plan procedures. A 24 hour SAFETY STANDDOWN has been initiated. Prior to the accident, Dwight and crews have had safety tailgate sessions throughout the project at beginning and days end briefings, including the morning prior to startup at 0600hrs which is commendable. FAA was notified and sent their representative to investigate. Thus far to this hour of my information there has not been an NTSB official on scene yet, however NTSB may have turned this accident over to FAA. Currently 2,500 acres remain to be sprayed of this 18,000 acre contract.

Noteworthy to all....not all cellular phone carriers have the greatest coverage across the country. Real life example: At 3:00 p.m. NTSB turned over the wreckage of the helicopter to Ag Rotors that crashed in Clearfield County as I was witness to the papers releasing the wreckage. This concluded the field investigation and was returning to the Ohio spraying project in Akron when I needed to fuel my car up. Fortunately, I called home to check messages as my cell has been out of coverage the entire time of the helicopter accident and found out that Jim Johnson, Mike Connors, Noel Schneeberger, George Brooks, Marc Roberts, and Dwight Scarbrough had been trying to contact me since the crash. I appreciate all these peoples efforts. I received much of the detail over the phone from Noel and Dwight after returning calls and notifying many of you on your voice mail. As aviation technical assistance was needed as soon as possible, Dwight contacted Marc Roberts (NA/St. Paul Field Aviation Officer who was working with an applicator further north, contacted Mike Hopf in my absence (good decision) to request assist. Mike is enroute to the site. Thanks Mike for dropping your work to lend a hand. I arrived at the commencement of this message at Akron, Ohio Comfort Inn (330) 666-5050, however, will be continuing over to Grand Rapids, Michigan and onward north of Muskegon to the crash site to investigate.

Professional counseling services are being served to those involved close to the accident. As I arrive on scene, I will be able to provide you further information. It's been a short night. /Dan

Danny R. Zimmerman (610) 557-4147 Office

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

(610) 587-9091 Cellular (610) 557-4154 Fax dzimmerman@fs.fed.us

Report 2

UPDATE - May 21,2000: Michigan Lymantria dispar Aerial Application Contract Aircraft Accident

On May 20 (Saturday) at 10:45 a.m., Muskegon County, Michigan *Lymantria dispar* Aerial Application Contractor, Hatfield Flying Services, experienced a fatal accident during a county spraying operation. Since the initial situation report, the following information provides you an update of events. In my absence of communication coverage, Marc Roberts contacted Mike Hopf, R9/RAO who responded immediately and arrived onsite 1:00 a.m. May 21. After learning of the accident as previously noted, Dan Zimmerman, NA/AAO departed Clearfield County, PA helicopter crash after witnessing the NTSB release of wreckage to Ag Rotors, stopped at the Ohio Project at Medina County Airport and received an project update and discussed safety topics, thereafter continuing to Muskegon County.

Hatfield's aircraft, a polish built Dromedere, model MA-18, N178RA, was enroute to spray block 32 located in Dalton Township near the village of Lake Club, approximately 15 miles north of the city of Muskegon, Michigan. The Federal Aviation Administration representative, Frank Schaefer, Grand Rapids FSDO, is in charge of the investigation and has made contact with the NTSB. At the time of the crash, a spotter plane was enroute near the spray block but was not in the position to observe the crash. There was no radio communication from the Dromedere prior to impact. Based upon eyewitness accounts, the aircraft involved in the accident was fully engulfed in a post-impact fire. The spotter aircraft initiated communication to base of operations which is privately owned by Hatfield Flying Service. Rescue efforts by county fire departments arrived within 8 minutes of the fatal accident. The aircraft crashed approximately 300' north of occupied residences. There were two witnesses who gave conflicting statements, however, both observed the aircraft in a low altitude, nose low descent, into the hardwood canopy. Due to previous days rainfall prevented the escape of the fire into the urban interface and was confined to the aircraft and immediate area surrounding the plane.

The medical examiner pronounced the pilot deceased. Name and time are being investigated. The crash site was secured by the Muskegon County Sheriff's Department throughout the evening and were released by the FAA at 10:00a.m. on May 21. On May 21 at 9:00 a.m., Bill Hatfield owner of Hatfield Flying Service, the company's Chief of Maintenance, and Frank Schaefer/FAA Principle Accident Investigator, and Mike Hopf, RAO met at the crash site. Upon conclusion of collecting data, the FAA released the wreckage back to Bill Hatfield through Rob Ribbins, County Application Coordinator. Plans to remove the wreckage will commence on Monday, May 22.

The pilot had delivered two loads of Bt prior to the accident and was just beginning his third load with approximately 300 gallons of Bt and an estimated 130 gallons of fuel onboard at the time the accident occurred. As a result of the airframe being totally consumed by the post crash fire, no valuable data can be collected from cockpit instruments or SatLoc tracking components.

As further information becomes available, we will forward on to you.

Danny R. Zimmerman (610) 557-4147 Office (610) 587-9091 Cellular (610) 557-4154 Fax dzimmerman@fs.fed.us

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

### 2000 Pennsylvania

YEAR:	2000
STATE:	Pennsylvania
SPRAY DATE:	5/16/2000
OWNER:	AgRotors, Inc.
TAIL NUMBER:	N52AG
AIRCRAFT:	Bell 205
FORMULATION:	Bt
PILOT INFO:	Michael L. Smith
INCIDENT TYPE	: Crash
WEATHER:	Favorable, clear skies, light wind, and plenty of daylight
BASIC INFO:	Helicopter goes down while spraying B.t Pilot was killed

#### NARRATIVE:

Email No. 1

Michael Smith, spray pilot with AgRotors, Inc., was killed last evening when his Bell 205 helicopter (N52AG) crashed while spraying State Forest land in Clearfield County for *Lymantria dispar*. Although details are still somewhat sketchy, the accident occurred between 7:00 - 8:00 PM. Additional information will be provided as it becomes available.

Larry D. Rhoads Chief Entomologist Irhoads@dcnr.state.pa.us 717-948-3941 717-948-3957 (Fax)

Email No. 2

The following is all of the information known to date:

Date - 5/16/00; Time - between 7:00 and 8:00 PM

Aircraft - Bell 205 helicopter (tail number - N52AG); Owner - AgRotors, Inc., Gettysburg, PA

Pilot - Michael L. Smith, Falls Creek, PA; Age - ca. 43; Injuries - Deceased

Circumstances - The pilot was spraying State Forest land in Clearfield County (block CFSF185) for *Lymantria dispar* suppression using Bacillus thuringiensis (Bt). He was on the third load of the evening session when the DCNR dispatcher noted that he was overdue. A search by DCNR personnel was initiated in the area where the pilot was known to be working. A fixed-wing aircraft, also under contract to DCNR for the suppression project, was called in to do a recon of the scheduled spray block. In the meantime, a DCNR Bureau of Forestry employee from the Moshannon Forest District discovered the crash site at the eastern end of the treatment block. Emergency response personnel from the county were called in to conduct the recovery. The impact was so violent that it took until 6:30 AM, Wednesday morning to extricate the pilot's body from under the wreckage.

FAA investigators have been called and were expected to be on-site sometime today. USDA-Forest Service authorities have also been notified and will send an air operations specialist to review the accident.

Weather at the time of the accident was favorable for spraying - clear skies, light wind, and plenty of daylight.

The crash site is located approximately 13.5 miles NNE of Clearfield in Clearfield County.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

Larry D. Rhoads Chief Entomologist Irhoads@dcnr.state.pa.us 717-948-3941 717-948-3957 (Fax)

#### Email No. 3

I just received some additional information on last night's fatal aircraft accident. With the cooperation of the NTSB, FPM personnel were able to recover the log files from the aircraft's SatLoc system. SatLoc is the brand name of the electronic tracking, guidance, and recording system (ETGARS) used in this particular aircraft. An ETGARS unit is required in every spray aircraft used on the DCNR suppression projects. These computerized systems provide the pilot with a visual image of the spray block and use GPS guidance to help the pilot maintain accurate spray runs while recording the aircraft's position at all times. A review of these files shows that the aircraft had not yet started spraying on its fourth load (my previous report erroneously indicated third load) and impacted in transit from the landing zone. At the time of impact, the aircraft was traveling almost due north and had not started to circle in order to line up for the east-west spray runs. Using the last shown coordinate information from the SatLoc files, personnel visited the site on the ground using a handheld GPS unit. It appears that the aircraft's electrical system may have quit shortly before impact as the crash site is on a straight line north from the last known coordinate. Although pure speculation at this point, this could indicate that the aircraft's engine guit shortly before impact.

Larry D. Rhoads Chief Entomologist Irhoads@dcnr.state.pa.us 717-948-3941 717-948-3957 (Fax)

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1995 Maryland
YEAR:	1995
STATE:	Maryland
SPRAY DATE:	5/9/1995
OWNER:	Downstown Aero
TAIL NUMBER:	N6762Q
AIRCRAFT:	Ag Cat
FORMULATION:	Unknown
PILOT INFO:	Robbie Robison
INCIDENT TYPE:	Emergency Landing
WEATHER:	Clear/Fair
BASIC INFO:	Ag Cat had to make emergency landing because of engine troubles.

#### NARRATIVE:

At 5:57 AM on May 9th, pilot Robbie Robison was working his first load when the engine to his Ag Cat backfired. After returning his plane to the landing zone, the mechanic found one spark plug fouled. The plug was replaced and the plane had a test flight and landed. At 7:15 AM the plane flew to the spray block to continue spraying. This time, the engine backfired "a couple of times". The plane returned to the landing zone. This time, the entire back bank of spark plugs were replaced. The plane was flight tested and returned to the spray block at 8:53 AM. The engine began to backfire. At first, the pilot was concerned that he might not make it to the landing zone. After landing, the crew worked on the plane and found water in the fuel. The spark plugs were cleaned and the fuel was drained. No problems were found with the aircraft after this work was done.

Reporter: Mark Taylor.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1995 Michigan
YEAR:	1995
STATE:	Michigan
SPRAY DATE:	5/30/1995
OWNER:	Unknown
TAIL NUMBER:	N48631
AIRCRAFT:	Ag Cat
FORMULATION:	Bt
PILOT INFO:	Daniel Dantuma - Cert# C317769049
INCIDENT TYPE: Ground Spill	
WEATHER:	Sunny and clear. Winds - 3 miles per hour - westerly. RH - 86%. Temp
BASIC INFO:	Spill - 200 gallons of Bt. Spill occurred at Harrison Airport in Clare County.

#### NARRATIVE:

Hopper door opened, spilled 200 gallons of Bt. After being loaded, the plane taxied approximately 100 feet from load site. Pilot stopped to review spray maps before taking off. The emergency dump valve released on its own. The pilot backed off and the spilled was cleaned up. The appropriate agencies were notified.

Reporter: John Hill.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1995 Tennessee
YEAR:	1995
STATE:	Tennessee
SPRAY DATE:	4/24/1995
OWNER:	Al's Aerial Spraying
TAIL NUMBER:	N8499K
AIRCRAFT:	Ag Cat
FORMULATION	: Bt
PILOT INFO:	Bill Hadfield.
INCIDENT TYPE	: Aerial Dump
WEATHER:	Calm. About 45 degrees F. and 85 percent humidity.
BASIC INFO:	AgCat lost power during takeoff and had to dump 350 gallons of Bt. The AgCat was able to turn around and land safely.

#### NARRATIVE:

At 9 AM on Tuesday, April 24, an AgCat, tail number N9499, lost power during take-off and did an emergency dump of 350 gallons of Bt. The AgCat was able to turn around and land safely at the airport. The Bt spill covered a 350 square foot grassy area off the end of the runway. The proper state officials have been notified. The cause of the engine failure is apparently a cracked oil cooler. The AgCat will be in repair for the rest of the day but should be back in service by Wednesday. There were no fatalities or injuries.

Reporter: John Ghent, USDA Forest Service

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1994 Arkansas
YEAR:	1994
STATE:	Arkansas
SPRAY DATE:	5/4/1995
OWNER:	Evergreen Helicopters, Inc.
TAIL NUMBER:	Unknown
AIRCRAFT:	Hiller Solloy
FORMULATION:	Bt
PILOT INFO:	Jim Fussel
INCIDENT TYPE:	Crash
WEATHER:	Fair
BASIC INFO:	Helicopter crashed on returning to the heliport. Pilot injured.

#### NARRATIVE:

On May 4, 1994 about 6:27 PM CDT, a Hiller-Solloy helicopter crashed on returning to the heliport. The helicopter did not have a Bt load. The pilot indicated he just had a loss of power. The pilot, Jim Fussel was slightly injured (complained of back problems) and is still in the hospital in Berryville, Arkansas, Carrol County. Sherrif's office and FAA have been notified. The contractor is Evergreen helicopters. The news media will be onsite today.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1994 Maryland
YEAR:	1994
STATE:	Maryland
SPRAY DATE:	5/31/1995
OWNER:	Unknown
TAIL NUMBER:	N121CD
AIRCRAFT:	Bell 47 Soloy
FORMULATION:	Dimilin
PILOT INFO:	Dirk Dekker
INCIDENT TYPE	: Crash
WEATHER:	Fair
BASIC INFO:	Helicopter experiences mechanical difficulties and goes down in an uninhabited wooded area near Hoyes in Garrett County, MD. The pilot sustained broken bones as injuries. A medivac helicopter flew the pilot to the Hagerstown, MD hospital for treatment.

#### NARRATIVE:

We regret to inform you that at approximately 7:40 A.M. today, May 31, 1994, there was an accident involving one of our spray aircraft. The aircraft involved, a Bell 47 Soloy N121CD, went down while spraying an uninhabited wooded area near Hoyes, Garret County Maryland. A MDA, Forest Pest Management ground observer at the scene of the accident immediately. Local emergency response was excellent and arrived within minutes of the incident. The pilot, Dirk Dekker, suffered broken bones in his left leg and other minor injuries but was conscious and alert. Likewise, the State Police medivac helicopter arrived within about 15 minutes of the accident and the pilot was flown to Hagerstown, MD. Mr. Dekker is undergoing surgery starting approximately 10 A.M. this morning. All spraying activities (one other spray aircraft was also working in the area) have been suspended at this time. The aircraft apparently experienced mechanical difficulties. The state police have secured the area and obtained all needed information.. The area being sprayed, block 074, was being treated with the insecticide Dimilin. Dimilin, active ingredient diffubenzuron, is an insect growth regulator which has the effect of interfering with one of the growth processes in insects and other arthropods. It had no toxic mode of action and no direct effect on vertebrates or fully grown insects and other arthropods. It is estimated that less than 50 gallons of dilute insecticide mix was aerially discharged from the aircraft over the spray block shortly before it went down. The MDA Pesticide Regulation Section is conducting an investigation. Preliminary estimates are that few if any effects would be observed due to the small amount of active ingredient discharged (no more than one pound) and the area over which it would have spread (probably several acres). Insecticide was not observed to be spilled at the site of the accident.

Reporters: Bob Tichenor and Mark Taylor.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1994 Michigan
YEAR:	1994
STATE:	Michigan
SPRAY DATE:	6/2/1994
OWNER:	Unknown
TAIL NUMBER:	Unknown
AIRCRAFT:	Turbine Ag-Cat
FORMULATION:	Bt
PILOT INFO:	Maurice Quesnel
INCIDENT TYPE	Crash
WEATHER:	Unknown
BASIC INFO:	Mechanical Failure causes a single engine airplane to do a crash landing in Lake Muskegon.

#### NARRATIVE:

Between 6:30 and 7:00 A.M. this morning, eastern time, an aircraft crashed into Muskegon Lake in Muskegon County, MI. The Pilot, Maurice Quesnel, was spraying a 65 acre campground (Muskegon State Park) with a full load of Bt (250-300 lbs). Next, the pilot said there was a loud "bang" and the propeller stopped moving. The pilot crashed into Muskegon Lake. Although the plane sank in 11 feet of water, fishermen aided the pilot, who was taken to a nearby hospital and treated for hypothermia. The pilot appears to be doing well. Muskegon State Park personnel were observing on site. No DNR or FS personnel were present. As of 11:00 A.M., the plane had been collared, and a salvage barge on the way. The plane should be out of the water by P.M. Turbine blade failure suspected as a likely cause of the accident.

Reporter: Frank Sapio

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1994 Pennsylvania
YEAR:	1994
STATE:	Pennsylvania
SPRAY DATE:	5/24/1995
OWNER:	N/A
TAIL NUMBER:	N/A
AIRCRAFT:	Bell 206
FORMULATION	Bt
PILOT INFO:	N/A
INCIDENT TYPE	: Misapplication
WEATHER:	Fair
BASIC INFO:	Several dead birds found after treatments. Birds are being tested to see whether they died from Bt, Dimilin, or other cause.

#### NARRATIVE:

On Friday afternoon, May 20, 1994, Mr. Jay Miller of Jackson Township, Huntingdon County, found two dead scarlet tanagers (Piranga olivacea) in or near a State Forest block (Block SF-21A, Huntingdon County) which he had observed being sprayed earlier in the day with Bt (Dipel 6AF at 36 BIU/A). On Monday, May 23, 1994, he found a dead red-eyed vireo (Vireo olivaceus) in the same vicinity. On May 23, he contacted the Shaver's Creek environmental Center in Barre Township, Huntingdon County (R.R. 1, Box 325, Petersburg, PA 16669 (814) 667-3424) which runs a bird rehabilitation center and reported his findings. Mr. Mike McCarthy of the SCEC sent the birds to the U.S. Fish and Wildlife Service, Wildlife Health Research Center, Madison, Wisconsin, to see if the birds had been killed by Bt or diflubenzuron, which had been sprayed recently in nearby areas, or by some other cause. Mr.. McCarthy will inform us of the results which are expected in seven to ten days.

Reporter is Larry Rhoads, Forest Suppression Section

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1993 Maryland
YEAR:	1993
STATE:	Maryland
SPRAY DATE:	5/7/1993
OWNER:	K & K Aircraft
TAIL NUMBER:	N38L
AIRCRAFT:	Twin Beech
FORMULATION	: Foray 48B
PILOT INFO:	Mike Timo
INCIDENT TYPE	E: Ground Spill
WEATHER:	Sunny
BASIC INFO:	Pesticide spill occurred while loading aircraft. Ground crew stopped and contained spill.

#### NARRATIVE:

Pesticide tank in aircraft overflowed while reloading aircraft for 2nd load of the day. Tank was assumed empty upon return from first load and was reported so by pilot. Tank actually had approximately 230 gal. when returning (capacity 500 gal.?) Overflow noted when another 350 gal. of mixed material had been metered. Ground crew reacted quickly and effectively stopped and contained spill. Factors relating to incident: 1) Pilot incorrectly reporting tank empty. No visual inspection of tank by pilot or contractor ground crew. (tank is stainless steel and in cargo area and cannot be inspected without going inside cargo area of aircraft) 2) Improper nozzle set up for job. 16 of required 33 nozzles were closed off previous work (prior to MDA contract). This was not corrected prior to starting work by the contractor, and resulted in application rate one half of what was expected. This also was not noted when aircraft was inspected before work and not noted during application.

Reporter: Bob Tichenor

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1993 Michigan
YEAR:	1993
STATE:	Michigan
SPRAY DATE:	5/17/1993
OWNER:	N/A
TAIL NUMBER:	N/A
AIRCRAFT:	N/A
FORMULATION:	N/A
PILOT INFO:	N/A
INCIDENT TYPE	: Threat
WEATHER:	N/A
BASIC INFO:	Citizen threatens to shoot County Coordinator who is trying to set a corner balloon. Coordinator calms man and leaves but cannot set balloon.

#### NARRATIVE:

The Saint Clair County Coordinator had contacted the lady of the house and gained permission to set a corner balloon for the block. On the morning of treatment while on that property at 5:30 A.M. the man of the house came out and threatened to get his gun and shoot the coordinator if he did not leave the property. The County Coordinator was able to calm the man but was unable to set the balloon.

Reporter: Kendra Anderson, MDA

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1993 Michigan
YEAR:	1993
STATE:	Michigan
SPRAY DATE:	5/25/1993
OWNER:	Earl Gorsuch
TAIL NUMBER:	N/A
AIRCRAFT:	N/A
FORMULATION:	N/A
PILOT INFO:	N/A
INCIDENT TYPE	: Threat
WEATHER:	N/A
BASIC INFO:	A telephone message is left at Earl's flying service threatening to shoot down any plane violating the caller's air space.

### NARRATIVE:

A telephone message was left at the business address of Earl's Flying Service threatening to shoot down the plane violating the caller's air space. The incident occurred while treating Gladwin county. The tape was delivered to the Sheriff's office to resolve. Earl decided not to pursue this incident.

Reporter: Mike Corneil, MDA Regional Lymantria dispar Specialist.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1993 Michigan
YEAR:	1993
STATE:	Michigan
SPRAY DATE:	6/3/1993
OWNER:	Unknown
TAIL NUMBER:	Unknown
AIRCRAFT:	Unknown
FORMULATION:	Dipel 6AF
PILOT INFO:	Unknown
INCIDENT TYPE	: Ground Spill
WEATHER:	N/A
BASIC INFO:	A spill of 5-15 gallons of Dipel 6AF occurred when hose was detached from plane before the pump was turned off.

### NARRATIVE:

A loading site spill of 5-15 gallons of Dipel 6AF occurred when the hose was detached from the plane before the pump was turned off.

Reporter: Mike Keem, MDA Regional Lymantria dispar Specialist.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1993 Tennessee
YEAR:	1993
STATE:	Tennessee
SPRAY DATE:	4/29/1993
OWNER:	Harol's Flying Service
TAIL NUMBER:	N9709
AIRCRAFT:	Ag-Cat
FORMULATION	: Bt
PILOT INFO:	Harold Miller
INCIDENT TYPE	: Ground Spill
WEATHER:	Unknown
BASIC INFO:	Spill of Bt insecticide on grass by runway. Spill was quickly cleaned up and no one was injured.

#### NARRATIVE:

Contractor left airport with 220 gallons of Bt. Within a short period of time, the contractor noticed that one of the nozzles was not functioning properly; therefore, the contractor returned to the airport. A ground crew person noticed that a hose was also leaking on the bottom of the plane and while trying to reclamp the hose, he inadvertently hit the dump valve. About 185 gallons of undiluted Bt spilled onto the grass at the edge of the runway. The ground person was wearing white protective clothing, but was splashed with Bt. He was hosed off and later took a shower. The spill was cleaned up according to the Tennessee Department of Agriculture's regulations.

Reporter: Donna Leonard, USDA FS.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

1993 Wisconsin	
YEAR:	1993
STATE:	Wisconsin
SPRAY DATE:	6/1/1993
OWNER:	K & K Aircraft
TAIL NUMBER:	Unknown
AIRCRAFT:	DC-3
FORMULATION:	Bt
PILOT INFO:	Unknown
INCIDENT TYPE	: Ground Spill
WEATHER:	Clear
BASIC INFO:	Time - 6:46 A.M.; Location - Brown County, Austin Straubel Airport. Dump valve was accidentally bumped when the pilot was inside of a DC-3. About 280 gallons of Bt-K spilled. the spill was contained using a dike of absorbant. Most was refiltered for reuse.

### NARRATIVE:

Time - 6:46 A.M. Shortly after entering his DC-3, the pilot bumped the dump valve in such a way that it was pulled up, disengaging its safety feature. Later, it was bumped again by his hip while he was inside cleaning the cockpit window. Altogether, 281 gallons of Bt-K were spilled. The pilot turned the valve off after people outside of the plane brought his attention to the problem by waving. The spill was on asphalt and was contained by using kitty litter as absorbent material. About 275 gallons of the Bt was recovered by pumping it up and filtering it for reuse. The used absorbent material was put into two fifty-five gallon drums. The DNR spill coordinator for the area was notified. The two drums were taken to a landfill and disposed of according to regulations.

Reporter: Kurt Pagel

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

1993 West Virginia	
YEAR:	1993
STATE:	West Virginia
SPRAY DATE:	5/11/1993
OWNER:	K & K Aircraft
TAIL NUMBER:	N8835Q
AIRCRAFT:	Ayers Thrush
FORMULATION	Dimilin
PILOT INFO:	Kurt Neuenschwaneer
INCIDENT TYPE	: Misapplication
WEATHER:	Fair; 74 degrees; wind - calm; RM 78%
BASIC INFO:	On May 11, 1993, while treating for <i>Lymantria dispar</i> , a spray plane being used on the project lost 20 to 30 gallons of Dimilin spray material. As the Dimilin fell to the ground, two persons were exposed to the material.

#### NARRATIVE:

On May 11, 1993, an Ayers Thrush was treating a series of blocks for *Lymantria dispar* in Morgan County. On the last block to be treated, a hose slipped from a pipe on the chemical delivery system. This caused 20 to 30 gallons of Dimilin to be released in rain sized droplets outside the spray block. Mr. James Ebbers and a child who was with him were exposed to the Dimilin. Mr. Ebbers lives approximately one mile north of the project's spray block. Mr. Ebbers contacted the airport and spoke with Norman Dean about any potential hazard to be caused by the Dimilin. At that time he reported to Mr. Dean that they had already showered and changed clothes. Mr. Dean explained to Mr. Ebbers that at the rate of exposure, the Dimilin should pose no serious human health risk, based on existing knowledge. Mr. Dean is sending Mr. Ebbers information on Dimilin safety. The only factor contributing to this incident was that it was caused by an apparent mechanical malfunction.

Reporter: Norman L. Dean, WVDA, Plant Industries Division.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

1993 West Virginia	
YEAR:	1993
STATE:	West Virginia
SPRAY DATE:	5/14/1993
OWNER:	K & K Aircraft
TAIL NUMBER:	N8835Q
AIRCRAFT:	Ayers Thrush
FORMULATION:	Dimilin
PILOT INFO:	Kurt Neuenschwander
INCIDENT TYPE:	Emergency Landing
WEATHER:	Clear; 56 degrees, RH 60%, Wind - 4 mph
BASIC INFO:	Thrush runs low on fuel on return trip from spray blocks to the airport and had to make an emergency landing in a pasture field.

#### NARRATIVE:

An Ayers Thrush ran low on fuel on the return trip to the airport after taking out a load of 230 gals of Dimilin to treatment blocks 5445 and 5449 in Grant County. The aircraft took off with this load at 840 hours from Grant County Airport. These blocks were approximately 10 miles southeast and 10 miles southwest of the airport and about 5 miles apart. Therefore the total ferry distance should have been about 25 miles. The engine quit due to fuel starvation and the pilot made a no power emergency landing in an open pasture field. The pilot landed in the field without injury to the pilot or damage to the aircraft. WVDA observation aircraft, SuperCub, N4079Z with pilot Joakim Gerber and observer, Jerry Judy were following the Thrush into the airport. They observed the landing and radioed the location and condition to Spray Operation HQ. Personnel from K & K Aircraft and WVDA took fuel to the location site and helped walk the field for debris and obstacles in preparation for take-off. K & K pilot Virgil Gottfried, went to the landing site to check out the aircraft and the site for a safe take-off. The Thrush made a safe take-off from the pasture field and returned to Grant County Airport at approximately 1230 hours. Factors relating to the incident include: 1) Pilot thought the aircraft had 2 1/4 hours of fuel on board and this was checked by the observer before take off. 2) Ferry distance was probably too far for the load, temperature, Relative humidity. The steep terrain and long climbs in the treatment blocks accelerated the consumption of fuel.

Reporter: J. Douglas Hacker and Jerry Judy, WVDA

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 Ohio
YEAR:	1992
STATE:	Ohio
SPRAY DATE:	5/15/1992
OWNER:	Ohio DNR
TAIL NUMBER:	N430NR
AIRCRAFT:	Hiller 12E
FORMULATION	Bt
PILOT INFO:	Jack Keaton
INCIDENT TYPE	: Emergency Landing
WEATHER:	Clear - winds 2 to 6 miles per hour - 70 degrees - daylight
BASIC INFO:	Helicoptor makes emergency landing safely after engine problems. No injuries.

#### NARRATIVE:

On May 15th, 1992, while flying for the Ohio Suppression project, the Hiller 12E helicopter made an emergency landing safely in a field. There were no injuries. The cause of the incident was that the helicoptor lost the harmonic balancing weight which fell into the fan. Both needed to be replaced. The helicopter was repaired in the field. Jack Keaton, the pilot, is age 43, 4,500 hours, 1000 in make.

Reporter: Allen Baumgard.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 Ohio
YEAR:	1992
STATE:	Ohio
SPRAY DATE:	5/16/1992
OWNER:	Ohio DNR
TAIL NUMBER:	N430R
AIRCRAFT:	Hiller 12E
FORMULATION:	Bt
PILOT INFO:	Jack Keaton
INCIDENT TYPE:	Emergency Landing
WEATHER:	Clear - winds 3 to 6 miles per hour - 75 degrees - daylight
BASIC INFO:	Engine problem forces pilot to land helicoptor.

### NARRATIVE:

While spraying, the valve and engine cylinder broke. Pilot forced to land while still under power. Landing was safe. Pilot has 4,500 hours total with 1,000 hours in the Hiller.

Reporter: Allen Baumgard Ohio DNR.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 Ohio
YEAR:	1992
STATE:	Ohio
SPRAY DATE:	5/19/1992
OWNER:	Ohio DNR
TAIL NUMBER:	N430NR
AIRCRAFT:	Hiller 12E
FORMULATION	: Bt
PILOT INFO:	Jack Keton
INCIDENT TYPE	Emergency Landing
WEATHER:	Clear - winds 3 to 7 miles per hour - 72 degrees - daylight
BASIC INFO:	Generator quits while in flight. Pilot is able to return to base.

### NARRATIVE:

Generator quit while in flight - no forced landing - returned to airport and had it repaired.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 Pennsylvania
YEAR:	1992
STATE:	Pennsylvania
SPRAY DATE:	5/16/1992
OWNER:	Aero Tech, Inc.
TAIL NUMBER:	N448AT
AIRCRAFT:	Ayres Turbine Thrush
FORMULATION	: Dimilin 25W
PILOT INFO:	Jim Uselton
INCIDENT TYPE	E: Ground Spill
WEATHER:	Cloudy; 65 deg.; visibility 8 miles; RH - 73%; wind 6 mph-east; fog-no
BASIC INFO:	Spill - 80 gallons of Dimilin 25W onto pavement. Most ran off immediately onto grass. No injuries. Clean-up done.

#### NARRATIVE:

Major spill of 80 gallons. Jim Uselton hit dump valve while entering loaded plane. Jim quickly reset valve but 80 gallons went onto tarmac (pavement). The majority went immediately into adjacent grass area. The remainder was flushed from the site with plain water. Chemical involved was Dimilin 25W.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 Wisconsin
YEAR:	1992
STATE:	Wisconsin
SPRAY DATE:	5/26/1992
OWNER:	Unknown
TAIL NUMBER:	Unknown
AIRCRAFT:	Cessna 172
FORMULATION	: N/A
PILOT INFO:	Andy Abrams
INCIDENT TYPE	E: Emergency Landing
WEATHER:	Clear, cool, winds calm
BASIC INFO:	Observation plane makes an emergency landing after engine sounded different.

#### NARRATIVE:

Observation plane pilot noticed engine suddenly sounded different. Pilot took immediate precautionary measure and landed on state highway 29, Kewaunee county, WI. No damage or injuries occurred during the landing. A later inspection of the aircraft after landing indicated that the engine had a bent push rod. It is suspected that a valve stuck which then resulted in a bent push rod.

Reporter: Wisconsin Dept. of Agriculture.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 West Virginia
YEAR:	1992
STATE:	West Virginia
SPRAY DATE:	5/11/1992
OWNER:	K & K Aircraft
TAIL NUMBER:	N1400E
AIRCRAFT:	Twin Beech
FORMULATION:	
PILOT INFO:	Unknown
INCIDENT TYPE	: Misapplication
WEATHER:	Temperature - 74 degrees; Wind speed 6-12 mph
BASIC INFO:	Citizen claims to have been sprayed while on the roof of his house. Citizen later called and said that he had been hospitalized with a respiratory problem 4-5 days later.

#### NARRATIVE:

Upon returning Mr. Schoo's call to our Inwood office, he said that he was in St. Agnes Hospital in Baltimore City, Maryland. He stated that he had been hospitalized with a respiratory problem four to five days after being sprayed by one of our Lymantria dispar spray aircraft, while on the roof of his house. He was subsequently released from the hospital, but later had to be readmitted for the same problem. He made reference to a diminished oxygen capacity and said he was requesting information from us on the spray material that might be helpful to his doctor. In reviewing why he was on his roof, he said he went up there to try to see the low flying plane better to try to determine what it was doing. He said he didn't think it was a spray plane, because it didn't look like a "crop duster". He said it was a small, twin-engine silver aircraft, with about five windows, and that you couldn't see a spray boom on it. I explained to him that what he had described fit the description of one of our contractor's Twin Beech spray aircraft and that most of the planes used for Lymantria dispar treatments do not look like traditional crop dusters... He pointed out that no one seemed to be aware that they were going to be treated, including the citizen coordinator of their treatment block, who is also president of their homeowners' association. He said that when they called the Martinsburg airport and the state police detachment that no one knew what the plane was doing. I explained to him that we do not notify cooperating landowners of the day on which they will be treated, due to the logistical problem of dealing with so many people. Our normal practice is to notify the public through media sources, particularly radio, and that we also routinely notify law enforcement agencies of our operations. I also explained how the influence of weather conditions makes it difficult to know exactly when a treatment is going to be applied in a given area.. Concerning the spray incident itself, he said the plane had gone out of sight and because of where his house sits in relation to the terrain, when it reappeared it was on top of him and starting to spray and he didn't have time to get back into the upstairs window of the house. He said he was soaked to the point of the liquid running off his nose and his shirt being wet and he had to ask his wife for a towel to dry off. He said that, because his roof line was above the trees, the aircraft was only 15-20 feet or so above him when it went over.. In two incidents unrelated to his own, he said that one of his neighbors that has a fish pond experienced a fish kill two days after the spray application and that two dogs from the neighborhood also got sick after the spraying. I asked him why the fish kill was not reported to us and he said that it was reported to DNR, but that the person contacted dismissed the incident as being unrelated to the spray application. Factors relating:

1) The issue of notification

2) The issue of the plane not looking like a "typical crop duster"

3) The homeowners response of getting on his roof.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 West Virginia
YEAR:	1992
STATE:	West Virginia
SPRAY DATE:	5/21/1992
OWNER:	K & K Aircraft
TAIL NUMBER:	N56KS
AIRCRAFT:	DC-3
FORMULATION	: Bt
PILOT INFO:	Brian Stoltzfus, Fred Bennett
INCIDENT TYPE	: Misapplication
WEATHER:	Wind Calm, temperature 56
BASIC INFO:	Citizen complains that DC-3 sprayed his organic gardent and greenhouse.

#### NARRATIVE:

Mr. Virgil Fallon claimed we sprayed his organic garden and greenhouse. The organic garden was inside the spray block #504. I do not know whether or not the DC-3 shut off while over the field and greenhouse. Mr. Fallon stated that he has proof that we sprayed his garden and will forward a letter.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1992 West Virginia
YEAR:	1992
STATE:	West Virginia
SPRAY DATE:	5/27/1992
OWNER:	Unknown
TAIL NUMBER:	N4079Z
AIRCRAFT:	Piper Super Cub
FORMULATION	: N/A
PILOT INFO:	Joakim Gerber
INCIDENT TYPE	: Crash
WEATHER:	Fair
BASIC INFO:	Piper Cub's prop strikes a runway indicator marker (not a light) as it moves towards the taxi ramp. Severe damage was sustained to the prop as well as to other parts of the plane. No injuries.
NARRATIVE:	

On the evening of May 22, 1992, I was to fly out of the Grant County Airport, Petersburg, WV in a Piper super cub (N4079Z) piloted by Joakim Gerber and act as an aerial observer for a thrush aircraft (N8835Q) piloted by Mervin Glick. The super cub was tied down in a grassy area in front of the airport office. As the thrush was being loaded with Dimilin, we (Joakim and I) boarded the super cub and, after making the necessary safety checks, began to taxi across the grass to the asphalt taxi ramp. We approached the ramp but had to stop and wait for other aircraft to clear before we could proceed to the runway. One plane, not part of the Lymantria dispar suppression project was coming in for a landing, while two spray planes and a chase plane waited on the taxi ramp and the loading area. Several minutes passed before the inbound plane landed and the outbound planes began to move. During this time we held our position in the grassy area.. After it touched down, the inbound plane could not enter the taxi ramp because of the suppression aircraft waiting there to enter the main runway. The inbound plane taxied past the ramp and waited there so the suppression aircraft could proceed to the runway. When the last of the suppression planes were on the runway Joakim motioned the pilot of the inbound plane to go ahead and use the taxi way. At that time he told me we would probably depart from the center of the runway, since we did not need the entire runway for our departure. We held our position in the grass until the inbound plane taxied past us... When the plane was clear, Joakim pushed on the throttle and we began to move towards the taxi ramp. We moved only a short distance, perhaps a couple feet at the most when the aircraft struck something and began to shudder. I could see debris flying all over the place and assumed we ran over one of the runway lights which line the taxi ramp. After Joakim shut down the engine, we got down out of the plane and assessed the damage.. The prop had struck a runway indicator marker (not a light) and destroyed it. The prop was severely damaged and the metal which covers the landing struts was dented. There were also some holes in the wing fabric, caused by flying debris. My best estimate is that this incident took place at about 6:50 P.M. Fortunately, no one sustained any injuries from this incident. Damage was limited to the super cub and the runway indicator marker.

Reporter: Jan Hacker WVDA

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1991 Maryland
YEAR:	1991
STATE:	Maryland
SPRAY DATE:	5/1/1991
OWNER:	Lawrence Duffy
TAIL NUMBER:	N2527C
AIRCRAFT:	Cessna 170
FORMULATION:	N/A
PILOT INFO:	Lawrence Duffy
INCIDENT TYPE	: Emergency Landing
WEATHER:	Clear; 50-60 degrees F.
BASIC INFO:	A Cessna 170 makes an emergency landing shortly after takeoff. Cause of problem was fire from electrical wires. There were no injuries to the pilot or passenger.

#### NARRATIVE:

Approximately 2 miles from airport, after takeoff and climb out, we noticed electrical wires burning. Within seconds the cockpit was filled with smoke. Pilot turned back to airport and had the runway made when we noticed blue flame between the pilot and copilot seats on the underbody of aircraft. Landed safely on runway and extinguished fire. Probable cause: Electrical wires (radio) burning ignited leaky fuel vent. Extent of damage: Burned hole in bottom of fuselage and burned radio wires.

Reported by: Deboray R. Godrey, Agriculture Inspector III.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1991 Ohio
YEAR:	1991
STATE:	Ohio
SPRAY DATE:	5/20/1991
OWNER:	Ohio DNR
TAIL NUMBER:	N440NR
AIRCRAFT:	Hiller 12E
FORMULATION:	Bt
PILOT INFO:	Jack Keaton
INCIDENT TYPE	Emergency Landing
WEATHER:	Clear day, 62 degrees, 3-5 mph winds
BASIC INFO:	Engine trouble forces an emergency landing. No injuries; nor aircraft damage; no spills

#### NARRATIVE:

The aircraft was ferrying its final load to the spray site. While enroute, the engine popped a few times and lost power. The pilot was forced to set the aircraft down immediately. The pilot landed in a hay field, engine still running. He did not have to jettison his load. There was no damage to the aircraft. It was repaired right in the field the following day and flown out. Factors relating to this incident: Mechanical failure (it sucked a valve).

Reporter: Alan Baumgaurd, Ohio DNR.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

4004

	1991 Pennsylvania
YEAR:	1991
STATE:	Pennsylvania
SPRAY DATE:	5/8/1991
OWNER:	K & K Aircraft
TAIL NUMBER:	N961GP
AIRCRAFT:	Twin Beech
FORMULATION:	Dipel 6AF
PILOT INFO:	Bruce Senger
INCIDENT TYPE	: Other
WEATHER:	Fair
BASIC INFO:	Pennsylvania police flag down spray plane.

#### NARRATIVE:

On Wednesday, May 8, 1991, at approximately 9:45 A.M., a spray aircraft treating private residential blocks in Lancaster County was prevented by the Pennsylvania State Police Aviation Patrol Unit from continuing spraying. The State Police were operating on a request from the Harrisburg Flight Standards District Office who in turn were responding to a landowner complaint received the previous day. On that day (Tuesday, May 7, 1991), the landowner called the Harrisburg FSDO and complained that a multi-engined aircraft had made 20 low level passes over the landowner's house. On Wednesday morning, a State Police helicopter observed the spray aircraft working and followed it into the Chester County Airport. At that time the officer issued the order to cease spraying because the pilot did not have an FAA congested area waiver in his possession. Numerous phone calls ensued to the Harrisburg FSDO and the Pennsylvania State Police from the State Forester, the Forest Pest Management Division Chief, and the Suppression Activities Section Supervisor. As a result, the aircraft was released to continue spraying (by which time winds in the target area had increased beyond acceptable limits). The FSDO official (charles Wotring, Operations Unit Supervisor 717-782-4528) indicated that the FAA would continue its investigation and, if warranted, assess penalties against the applicator. This incident resulted in the loss of several hours of acceptable spray time and prevented that spray aircraft from finishing its assigned blocks in District 17.. The aircraft involved was a Twin Beech (N961GP) piloted by Bruce Senger and owned by K & K Aircraft, Inc., of Bridgewater, Virginia. The spray blocks involved were L-14 on Tuesday and L-19 and L-21 on Wednesday. All blocks were being treated with undiluted Bt (Dipel 6AF) at 53.3 ounces (20 BIU) per acre.

Reported by: Larry Rhoads, Supervisor Suppression Activities Section.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

1991 Pennsylvania	
YEAR:	1991
STATE:	Pennsylvania
SPRAY DATE:	5/8/1991
OWNER:	Evergreen Helicopters, Inc.
TAIL NUMBER:	N103EH
AIRCRAFT:	Hiller/Soloy
FORMULATION:	Thuricide 48LV
PILOT INFO:	Ron Wolfe
INCIDENT TYPE	: Misapplication
WEATHER:	Fair
	Couple exposed to Bt in Keystone State park in Westmoreland County while having lunch. The couple files a complaint with the district forester.

#### NARRATIVE:

On the morning of Wednesday, May 8, 1991, between approximately 11:30 A.M. - 11:55 A.M. 72 acres in Keystone State Park, Westmoreland County, were sprayed with Bt. At the time of spraying, Mr. and Mrs. Edward Miller of McKeesport were having lunch. Because they were exposed to the spray, they have since filed a complaint with the district forester in the Forbes Forest District Office in Laughlintown, Pennsylvania. Mrs. Miller claims to be sensitive to pesticides although she is not registered on the Pennsylvania Department of Agriculture Registry of Pesticide Hypersensitive Individuals. They do admit to having seen a caution placard regarding the impending spraying in the park but did not check with the listed contact point for additional information. They said that after the spraying they checked with a uniformed official (no name given) and "a girl" (no name given) in the office, both of whom knew nothing about the spraying. Mr. and Mrs. Miller have indicated that they are going to pursue the matter of inadequate notification on the part of Keystone State Park with their elected representative. The aircraft being used was a Hiller/Soloy helicopter (N103EH) piloted by Ron Wolfe and owned by Evergreen Helicopters, Inc., working under contract to DER. The Bt formulation used was Thuricide 48LV applied undiluted at 53.3 ounces (20 BIU) per acre.

Reported by Larry D. Rhoads, Supervisor, Suppression Activities Section.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1991 Pennsylvania
YEAR:	1991
STATE:	Pennsylvania
SPRAY DATE:	5/10/1991
OWNER:	Summit Helicopters, Inc.
TAIL NUMBER:	N2150K
AIRCRAFT:	Bell 206
FORMULATION:	Dipel 6AF
PILOT INFO:	Dusty L. Mosness
INCIDENT TYPE:	Misapplication
WEATHER:	Fair
BASIC INFO:	A complaint is filed claiming that Bt spraying killed eight parakeets.

#### NARRATIVE:

On Monday 22, 1991, a complaint was filed with the district forester at the Wyoming Forest District office in Bloomsburg claiming that the Bureau of Forestry's Bt spraying killed eight parakeets. Mr. A. Lloyd Bowers, R.D. 2, Sunbury, stated that the birds, which were caged outdoors, began shivering and died after the spraying on the morning of May 10, 1991 (between 10:25 A.M. - 11:09 A.M.). He also said that the same thing happened with three other birds during the course of the Option II spray project that year.. The spray block in which he is located is N23 (the Option II block number for 1990 was N21). The Bt formulation used was Dipel 6AF applied undiluted at 53.3 ounces (20 BIU) per acre. The aircraft used was a Bell 206 helicopter (N2150K) piloted by Dusty L. Mosness and owned by Summit Helicopters, Inc., Bridgewater, Virginia, which is under contract to DER.

Reported by Larry D. Rhoads, Supervisor, Suppression Activities Section. PA DER

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1991 Pennsylvania
YEAR:	1991
STATE:	Pennsylvania
SPRAY DATE:	5/15/1991
OWNER:	Agricultural Helicopter Serv., Inc.
TAIL NUMBER:	N2619B
AIRCRAFT:	Bell G3B1 Soloy
FORMULATION:	Dipel 6AF
PILOT INFO:	Ted Herring, 4500 hours total, 240 in make
INCIDENT TYPE	: Crash
WEATHER:	Daylight, clear, 5+ miles visibility, low to no wind, light gnd haze
BASIC INFO:	Aircraft crash lands after having apparent engine trouble. Pilot injured and the helicoptor sustains substantial damage.

#### NARRATIVE:

Aircraft had completed treatment of spray block Lycoming 110 on Contract 91-2 in Lycoming County and crash landed into an open field at approximately 8:00 A.M. while returning to the landing zone. The accident was reported to county control by the landowner, Mrs. Harmon, at 8:07 A.M. FAA has indicated that aircraft had fuel. Witness on ground states that it sounded as though engine quit. Insecticide being used was Bt (Dipel 6AF) being supplied undiluted at 53.3 ounces (20 BIU) per acre. No significant insecticide spill occurred. Injuries - pilot in critical condition at Geisinger Medical Center in Danville - underwent surgery for injuries. The helicopter was under subcontract to K & K aircraft.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1991 Pennsylvania
YEAR:	1991
STATE:	Pennsylvania
SPRAY DATE:	5/19/1991
OWNER:	Summit Helicoptors, Inc.
TAIL NUMBER:	N2150K
AIRCRAFT:	Bell 206
FORMULATION:	Dipel 6AF
PILOT INFO:	Dusty L. Mosness
INCIDENT TYPE	: Misapplication
WEATHER:	Fair
BASIC INFO:	Helicoptor sprays mother and her two children at primitive campsite on block. Mother files a complaint.

#### NARRATIVE:

On Sunday morning, May 19, 1991, 453 acres at the U.S. Army Corps of Engineers' Tioga-Hammond Lakes project in Tioga County were treated with Bt between 7:15 A. M. - 8:05 A.M. At the time of spraying, Mrs. Cathy Richart and her two children were camping at a primitive camp site. Mrs. Richart and her children were in a tent when the insecticide application took place. Mrs. Richart has filed a complaint with the Tioga-Hammond Lakes land manager and with the district forester in the Tioga Forest District office in Wellsboro, Pennsylvania, claiming that she was not notified of the impending spraying. Caution placards regarding the spraying were posted at strategic locations within the project area. Bureau of Forestry personnel notified Tioga-Hammond Lakes personnel of the spraying on Saturday and again Sunday morning and had obtained a signed waiver authorizing the spraying on Sunday. The district forester has at her request, sent Mrs. Richart copies of the MSDS for Bt and a Bt informative bulletin.. The aircraft used was a Bell 206 helicopter (N2150K) owned by Summit Helicopters, Inc., under subcontract to K & K Aircraft, Inc., working under contract to DER. The pilot was Dusty L. Mosness. The Bt formulation was Dipel 6AF being applied undiluted at 53.3 ounces (20 BIU) per acre.

Reporter: Larry D. Rhoads, Supervisor, Suppression Activities Section, PA DER.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1990 Pennsylvania
YEAR:	1990
STATE:	Pennsylvania
SPRAY DATE:	5/7/1990
OWNER:	Cordoba Helicoptor Enterprises, Inc
TAIL NUMBER:	N731ET
AIRCRAFT:	Cessna 188 Ag Truck
FORMULATION	: Dipel 8AF
PILOT INFO:	Carl Myers
INCIDENT TYPE	: Misapplication
WEATHER:	Fair
BASIC INFO:	Ag Truck continues to spray onto off-site property due to a downed marker balloon.

#### NARRATIVE:

On May 7, 1990, at approximately 10:00 A.M. 60 gallons of Bt insecticide were applied off-site during the course of the Lehigh County Option II Project. This incident occurred during the spraying of Block 18 when the pilot flew into Northampton County and continued spraying as a result of a downed marker balloon. The block is located immediately south of Bethlehem and the off-site property treated is east of Route 378 in the community of University Heights. The material sprayed was Dipel 8AF mixed at the 16 BIU rate and applied at the rate of one gallon per acre. The aircraft was a Cessna 188 Ag Truck (N731ET) piloted by Carl Myers under subcontract to Cordoba Helicopter Enterprises, Inc., Hightstown, NJ.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

		1990 Pennsylvania
YE	AR:	1990
STA	TE:	Pennsylvania
SPF	RAY DATE:	5/8/1990
ow	NER:	Aero Tech, Inc.
TAI	L NUMBER:	N2369N
AIR	CRAFT:	Air Tractor AT 400
FOF	RMULATION:	Foray 48B
PIL	OT INFO:	Ted Stallings
INC	IDENT TYPE:	Crash
WE	ATHER:	Fair
BAS		Air Tractor hits a high tension line (115,000 volt) and crashes. Pilot burned badly but walks to a road where he got a ride to Tyrone Hospital.

#### NARRATIVE:

At approximately 6:30 A.M. on May 8, 1990, a spray aircraft piloted by Ted Stallings contacted an electric transmission line in Blair County, Pennsylvania, and crashed. The airplane was an Air Tractor AT 400. (N2369N) owned by Aero Tech, Inc., Bovina, Texas. The pilot was making the final pass on Block 82, an Option II block being treated with Foray 48B at 20 BlU per acre at an application rate of one gallon per acre.. The accident occurred one mile north of Tyrone near the village of Vail. The aircraft apparently burst into flames upon contact with the power line and crashed over one quarter mile away. Mr. Stallings walked from the crash site to a road where he was transported to the Tyrone Hospital in a private vehicle. He was later transported by air to the West Penn Burn Center in Pittsburgh where he was listed in critical but stable condition with burns over 75 percent of his body. Some of the burns on his upper body and arms are reported to be second and third degree.. The accident was reported to the FAA in Pittsburgh, the regional DER office in Harrisburg, and the Pennsylvania Fish Commission in Newville. No problems were reported with contamination by the insecticide or the aircraft fuel. A report from the FAA and the Bureau of Forestry Operations Advisor will be forthcoming.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

1990 Pennsylvania		
YEAR:	1990	
STATE:	Pennsylvania	
SPRAY DATE:	5/12/1990	
OWNER:	Altair, Inc.	
TAIL NUMBER:	N7155S	
AIRCRAFT:	Turbine Thrushes	
FORMULATION:	Dimilin 25W	
PILOT INFO:	William Hamilton and Phillip DeMaeyer	
INCIDENT TYPE	: Misapplication	
WEATHER:	Fair	
BASIC INFO:	Two turbine thrushes miss a cutoff point and continue to spray outside of the designated treatment area. Observation craft spots the error.	

#### NARRATIVE:

On Saturday morning, May 12, 1990, at approximately 10 A.M, a portion of state forest land in District 16, not slated for treatment but contiguous with Block SF-3, was sprayed with diflubenzuron. The area sprayed had been deleted from the district's original proposal in Tioga county because it contained a wetland community supporting populations of Lycaena epixanthe, a lepidopteran (the bog copper) which is contained in the Pennsylvania Natural Diversity Inventory as a species of concern.. The incident occurred when two Turbine Thrushes (Ayres S2R T-34), flying in tandem, missed a cutoff point and continued to spray outside of the designated treatment area. A Bureau of Forestry employee flying in a bureau-supplied observation aircraft spotted the error and alerted the spray pilots.. The aircraft are identified as N7155S and N7155W piloted by William Hamilton and Phillip DeMaeyer, respectively, and under contract from Altair, Inc., (.4 ounce active ingredient) per acre diluted in 96 ounces of water.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1990 Virginia	
YEAR:	1990	
STATE:	Virginia	
SPRAY DATE:	5/7/1990	
OWNER:	K & K Aircraft	
TAIL NUMBER:	N/A	
AIRCRAFT:	N/A	
FORMULATION:	N/A	
PILOT INFO:	N/A	
INCIDENT TYPE: Threat		
WEATHER:	N/A	
BASIC INFO:	An anonymous call is made in which the caller threatens to shoot at spray planes which fly over his property.	

#### NARRATIVE:

An anonymous phone call was made to the Loudoun County *Lymantria dispar* Office today, in which the caller threatened to shoot any planes that crossed his property. Apparently the caller did not keep his phone call private, in that he "bragged" to others that he had made the threat. The Loudoun County Sheriffs Department got word of the threat, as well as finding out the identity of the individual that made the call. The investigation is continuing.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

1990 Virginia		
YEAR:	1990	
STATE:	Virginia	
SPRAY DATE:	5/8/1990	
OWNER:	K & K Aircraft	
TAIL NUMBER:	Unknown	
AIRCRAFT:	Turbine Thrush	
FORMULATION	: Unknown	
PILOT INFO:	Unknown	
INCIDENT TYPE	: Emergency Landing	
WEATHER:	Fair	
BASIC INFO:	Engine failure forced a Turbine Thrush to make an emergency landing. The aircraft sustained minor damage during its landing.	

#### NARRATIVE:

At approximately 11:30 P.M a Turbine Thrush under contract with the VA Department of Agriculture to treat Loudoun County was forced to make an emergency landing in Loudoun due to engine Failure. The aircraft attempted to land on a grassy runway, but overshot it. It was forced to "hop" a hedgerow of trees, before coming to a stop in an adjacent field. Slight damage was reported to one of the wings, when the aircraft "clipped" a tree on the hedgerow. The boom was also taken off during the "clipping". No injuries were reported.

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

1990 Virginia		
YEAR:	1990	
STATE:	Virginia	
SPRAY DATE:	5/9/1990	
OWNER:	K & K Aircraft	
TAIL NUMBER:	NIFN	
AIRCRAFT:	DC-3	
FORMULATION:	Bt	
PILOT INFO:	Steve Stephens	
INCIDENT TYPE	: Aerial Dump	
WEATHER:	Fair	
BASIC INFO:	Pilot dumps 600 gallons of Bt from his DC-3 after experiencing engine trouble. The pilot made it safely back to the Manassas Airport using one engine.	

#### NARRATIVE:

On May 7, 1990 at approximately 9:00 A.M. in Prince William County, a DC-3 aircraft (NIFN) piloted by Steve Stephens under state contract (IFB-90-009) for *Lymantria dispar* spraying, experienced engine trouble and jettisoned 600 gallons of Bacillus Thuringiensis (Bt) in the Broad Run Area. The material was released in a Bt spray block in Prince William County that was being treated at the time. The aircraft safely returned to Manassas Airport using one engine. Prince William County *Lymantria dispar* Coordinator Kim Larget immediately contacted VDACS, and her immediate supervisor. The fire and rescue, a HazMat representative, and Prince William County *Lymantria dispar* personnel field-verified the location of the emergency dump. The area is a partially wooded site with some surrounding open fields. There were no injuries nor were any reports received of the material coming into contact with anyone. The office of Pesticide Management (Frank Filipy) has conducted a more formal investigation

Aircraft incidents which occurred during USDA cooperative Suppression, Eradication, and Slow-The-Spread programs nationwide.

	1990 West Virginia
YEAR:	1990
STATE:	West Virginia
SPRAY DATE:	5/21/1990
OWNER:	K & K Aircraft
TAIL NUMBER:	Unknown
AIRCRAFT:	DC-3
FORMULATION	Unknown
PILOT INFO:	Unknown
INCIDENT TYPE	: Crash
WEATHER:	Fair
BASIC INFO:	DC-3 runs into a power line in Hampshire County, WV. Both Pilot and Copilot were killed.

#### NARRATIVE:

On Saturday, May 21, a DC-3 spraying for *Lymantria dispar* for the West Virginia Cooperative Suppression Project crashed. The aircraft was owned by K & K. Both pilot and co-pilot were killed. The plane apparently hit a power line. The accident occurred in Hampshire County, West Virginia.. Specific details are not known at this time. Will provide an update as soon as we receive one.. (Details given later by Jan Hacker of the WVDA are that the plane ran into a power line which sliced through the window of the cockpit instantly killing both pilot and copilot. Other details, Jan said, are not worth giving.).