



DEPARTMENT OF THE NAVY

NAVAL AIR STATION
JACKSONVILLE, FLORIDA 32212-5000

IN REPLY REFER TO:
NASJAXINST 3750.1C
N32
28 Nov 12

NAS JACKSONVILLE INSTRUCTION 3750.1C

Subj: BIRD AIRCRAFT STRIKE HAZARD (BASH) REDUCTION PROGRAM

Ref: (a) OPNAVINST 5090.1C
(b) OPNAVINST 3750.6R
(c) OPNAVINST 3710.7R
(d) NAVFAC P-73, Vol II
(e) FAA Handbook 7110.65
(f) CNIC BASH Program Manual
(g) CNICINST 3700

Encl: (1) How to Collect Birdstrike Evidence
(2) General Information for Collecting Birdstrike Material
(3) "Make-Your-Own" Birdstrike Collecting Kits

1. Purpose. To reduce the potential for collisions between aircraft and birds or other animals. This instruction establishes procedures and assigns responsibilities to identify high hazard situations and bird watch conditions and to ensure safe air operations.

2. Cancellation. NASJAXINST 3750.1B.

3. Introduction. Bird strikes have plagued aviators since the beginning of naval aviation. The Navy's first loss of life due to a bird strike, occurred in 1914. Coincidentally the same year, it obtained its first aircraft. From March 1995 to March 1997, naval aviators reported 1,420 bird strikes, resulting in 107 aircraft mishaps, 32 foreign object damage (FOD) engines and over \$108 million in damages. Fortunately, there were no fatalities. These incidents have heightened Navy/Department of Defense (DoD) interest in BASH programs. The Naval Safety Center's review of recent USN bird-aircraft mishaps found that the lack of a BASH Plan was a consistent deficiency. Naval Safety Center data shows that 65% of all bird strikes occur within the airfield environment. The Safety Center also estimates that only one of four bird strikes is reported, suggesting that an even larger hazard exists. A bird-aircraft strike can cause major damage and loss of life. While severe aircraft mishaps by definition are rare events, it is difficult to estimate the absolute risk of a bird strike causing a mishap. Instead, in aviation, it is customary to examine leading indicators that are correlated with mishap risk but occur more often; i.e., bird populations, near-misses, engine damage and reported strikes. Increases in these factors are considered to show deterioration in the margin of safety, even if no mishaps take place. Historically, rises in leading indicators were a prelude to major mishaps.

4. Description. Naval Air Station Jacksonville (NASJAX) is located in Duval County, Florida, approximately eight miles southwest of downtown Jacksonville, on the east and west sides of U.S. Highway 17. The Station is on a peninsula between the St. Johns and Ortega Rivers, and is comprised of 3,896 acres, 2,128 acres of which are classified as unimproved. Field elevation is 22 feet MSL, and the general topography is flat. The area around NASJAX is primarily urban, but the airfield is adjacent to the St. Johns River, and a variety of habitats are present in the vicinity.

a. The area immediately surrounding the airfield is mowed grass, with Bahia grass the most dominant. The mowed clear zone abuts palustrine forested and emergent wetlands. Planted stands of slash pine occur in upland areas. A private residential golf course is located less than 2,000 feet from runway 10/28; Casa Linda Lake and the NASJAX golf course are located approximately 4,000 feet south of runway 10/28. No landfills are located within 2 miles of any NASJAX runways. The close proximity to a major river contributes to the BASH problem at NASJAX during periods of migration. The presence of several large hangars provide attractive roosting and nesting sites for resident species, and expanses of grass and emergent wetlands adjacent to the airfield may attract both residents and migrants for feeding. Outlying Landing Field (OLF) Whitehouse is approximately 26 miles northwest of NASJAX in Duval County, Florida.

b. The area around OLF Whitehouse is mostly rural, and a mowed grass clear zone surrounds the airfield. There are 1,160 acres of planted pine and mixed pine/hardwood forest adjacent to the clear zone, and emergent wetlands in the immediate vicinity of the airfield. These habitats are utilized by a variety of wildlife, including several species of raptors (hawks and vultures) which can present serious BASH problems. Bird-aircraft strike hazards exist at NASJAX and OLF Whitehouse due to resident and migratory bird species. In addition, the presence of protected species presents regulatory concerns that could impact operations. This instruction includes policies and procedures designed to minimize aviation hazards at NASJAX and OLF Whitehouse in accordance with references (a), (b) and (c).

5. Objectives. BASH does exist at this installation and within the immediate vicinity, due to migratory bird species. Daily and seasonal bird movements create various hazardous conditions to aviation. This plan is designed to reduce the bird hazard in and around NASJAX. This plan is designed to do the following:

a. Establish procedures to identify high hazard situations and to aid supervisors and aircrews in alerting/discontinuing flying operations when required.

b. Provide a method for disseminating information to all tenant and transient aircrews on bird hazards and procedures for bird avoidance.

c. Establish active techniques to disperse birds from the airfield.

d. Establish passive techniques to decrease airfield attractiveness to birds.

e. Establish procedures for collecting bird strike remains.

f. Establish local procedures for reporting of bird strikes.

6. Discussion. No single solution exists to the BASH problem. As a result, a variety of techniques and organizations must be involved to ensure success of this program. The program encompasses actions that may reduce or eliminate bird or other animal hazards to aviation, specifically bird

avoidance and bird control (including harassment, grounds maintenance, habitat modification, and depredation). NASJAX has a large and potentially dangerous bird population. Daily and seasonal bird movements in the vicinity of the airport create various hazards to aircraft. Accordingly, the BASH program is designed to control birds and to provide increased levels of safety during the critical phases of flight. This plan establishes specific procedures to reduce known and future bird hazards to minimize aviation hazards.

7. Explanation of Terms

a. Active Bird Dispersal. Harassment techniques employed to disperse birds from airfield and surrounding areas. Methods may include chase, pyrotechnics, bioacoustics, and depredation.

b. Bird Aircraft Strike Hazard (BASH). A general term used to describe bird hazards and bird hazard programs.

c. Bird Hazard Condition (BHC). A bird hazard alert condition used to warn aircrew of bird activity.

d. BASH Detection and Dispersal Team (BDDT). Roving airport patrol, consisting of station wildlife biologist and select field support personnel that report BHC and disperse problem birds via approved dispersal methods.

e. BASH Advisory. A radio transmission from Air Traffic Control (ATC) or aircrew used for reporting specific bird hazard information. May be real time or disseminated via Automatic Terminal Information Service (ATIS) broadcasts.

f. Depredation. Technique used to permanently remove problem birds from the airfield and hangars when other scare tactics are ineffective. Threatened and endangered species, as well as species of special concern, are federally protected and cannot be depredated without a permit from the U.S. Fish and Wildlife Service. The application of avian poisons, such as Avitrol for any bird species, requires a permit from the Florida Fish and Wildlife Conservation Commission. If in doubt about bird species identification, contact the Public Works Office Natural Resources Manager.

g. Pyrotechnics. Noise producing devices fired from pistol or shotgun used by personnel to scare birds away from runways and airport areas. All firearms and pyrotechnics shall be handled in accordance with applicable Navy and Federal laws and instructions.

h. Propane Cannons. Stationary non-projectile sound producing device used to disperse birds from airport areas.

i. Bird Strike. Any contact between a bird or other animal and an aircraft, whether or not damage occurred. All wildlife strikes, damaging or non-damaging, are required to be reported to the Naval Safety Center and the NAS Jacksonville BASH Program Manager. For the purposes of this instruction the term 'bird strike' will include all wildlife both terrestrial and airborne.

j. Salvage. The act of collecting wildlife or wildlife remains from an aircraft or from the airfield environment.

k. Wildlife Services. An office of the U. S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service which is working in an agreement at the installation to provide BASH assistance. The tasks and responsibilities of the USDA Wildlife Biologist include:

- (1) USDA Wildlife Biologist co-chairs Bird Hazard Working Group (BHWG) meeting.
- (2) Conduct ongoing wildlife/airfield surveys and provide data and analysis to the BHWG.
- (3) Brief tenants on BASH activities and potential wildlife hazards via safety stand downs and squadron briefings.
- (4) Serve as the primary responder when hazardous wildlife species are reported on the airfield.
- (5) Maintain and review a database of all wildlife/aircraft strikes occurring at NASJAX.
- (6) Implement wildlife damage control measures, e.g. wildlife hazing/deterrence, trapping, lethal control, etc.
- (7) Monitor wildlife activity during the air show.
- (8) Coordinate BASH management practices with other NAS Jacksonville departments and tenant commands as necessary.
- (9) Collect and preserve animal remains associated with aircraft strikes. Update WESS Hazreps with species information.

8. Policies and Procedure. The BASH Program is an ongoing process, including both information dissemination and active/passive bird control techniques. Of these processes, the most critical is the aircrew notification system. This system establishes procedures for the immediate exchange of information between the control tower and aircrews concerning the existence and location of birds that pose a hazard to flight safety. Additionally, a cautionary advisory is published in the DoD Flight Information Publication AP/1 under Supplementary Airdrome Remarks. The following organizations and procedures are established in order to ensure safe air operations:

a. BASH Working Group (BWG). The BWG is organized to implement, monitor and provide training for the BASH Management Plan; collect, compile, and NASJAXINST 3750.1C review wildlife hazard data; and to recommend actions in land and wildlife management and/or operational procedures to reduce wildlife hazards to aircraft. The BWG allows installation departments affected by wildlife hazards the opportunity to meet and discuss problems and possible solutions. BWG members include civilian and military personnel from various

departments. These representatives are expected to disseminate pertinent information from the meetings to co-workers within their respective departments. It allows base personnel affected by bird problems the opportunity to meet and discuss possible solutions. The BWG shall meet quarterly with representatives from each organization concerned with bird hazards. BWG shall consist of the following personnel:

(1) NASJAX Air Operations Aviation Safety Officer shall be the Chair of the BHWG. The Chair shall make recommendations to the Commanding Officer regarding all bird hazards.

(2) NASJAX Commanding Officer (when available).

(3) US Department of Agriculture- Wildlife Biologist (Co-chairman).

(4) Airfield Manager.

(5) Wing, Squadron and Tenant Command Aviation Safety Officers.

(6) Air Traffic Control Facility Officer (ACTFO).

(7) Natural Resources Biologist in the Public Works Office.

(8) Transient Line (T-Line) Division Officer.

(9) NASJAX Public Works Officer/Environmental.

(10) Security Representative (as required).

(11) NAS JAX Pest Management Coordinator in the Environmental Office.

(12) NASJAX Environmental Department Representative.

(13) NASJAX Public Affairs Officer.

(14) NASJAX Community Plans and Liaison Officer (CPLO).

b. Bird Hazard Warning System. The following standardized BHC will be used at NASJAX to warn aircrew and support personnel of the current bird threat to operations. These codes are identical to the USAF codes in section "B" of the DoD FLIP (Flight Information Handbook). The ACTFO or Tower Supervisor shall set the BHC. Bird locations should be given with the following condition codes:

(1) BHC Severe. Generally defined as heavy concentrations of birds (more than 15 large or 30 small birds) on or immediately adjacent to the active runway or other specific locations that present an immediate hazard to flight operations. Active dispersal will be initiated during this BHC, and personnel shall remain on the airfield actively involved in dispersal techniques until this BHC is downgraded.

Note: RED may also be declared when birds of any size or quantity present an immediate hazard.

(2) BHC Moderate. Generally defined as moderate concentration of birds (5-15 large or 15-30 small birds) observable in locations that represent a probable hazard to flying operations. Positive actions should be taken to disperse the concentration of birds that are causing the hazard.

(3) BHC Low. Normal bird activity on and above the airfield with a low probability of hazard. If, in the judgment of the observer, the concentration of birds (less than described in moderate) is less than those indicated for a specific BHC, but a hazard is believed to exist, a higher BHC may be declared. The Tower may determine if bird activity away from the primary runway constitutes a threat to flying operations. If it does not, the Tower may lower the BHC for the primary runway while keeping the higher BHC for the other area.

(4) Downgrading BHC. Once a BHC has been declared, it shall be downgraded or cancelled commensurate with updated information. The ACTFO or Tower Supervisor will make the final determination on BHC.

c. Bird Hazard Communication. Disseminating BHC is critical to BASH effectiveness. The Tower shall disseminate the BHC by the following means:

(1) Include BHC on ATIS Broadcasts.

(2) Notify inbound/departing aircraft of BHC if aircraft has received ATIS and the BHC has changed, or aircraft have not received ATIS.

(3) Provide additional bird advisories as needed.

(4) The Tower Supervisor will direct the BDDT personnel to the location where the wildlife is posing a problem.

(5) For rapidly changing BHC place a statement on ATIS advising aircrews to contact Ground or Tower for the latest BHC.

d. Bird Hazard Reporting. The ACTFO or Tower Supervisor ensure hazardous conditions are reported to the pilots. Declaration of a BHC will be based on the following:

(1) Visual observation of bird activity on or near the airfield by Control Tower personnel.

(2) Observations relayed to the Tower by any of the following personnel: USDA Wildlife Biologist, Air Operations Personnel, weather observers, LSO, ground electronics maintenance, airfield lighting technicians, crash crews, sweepers, mowers, security police, transient line personnel, and any other personnel driving on the airfield.

(3) If a bird hazard exists, other personnel may notify the Tower. This notification can be made on a radio net or by telephone. Reports should include:

(a) Identity of caller (agency for ground personnel, call sign for aircrews).

- (b) Date and time.
- (c) Location.
- (d) Altitude, if able.
- (e) Approximate number and type of birds (if known).
- (f) Behavior of birds (flying to or from a location, landed in an area etc).
- (g) Weather conditions.
- (h) Possible attractants.

e. Active Dispersal Equipment. There are a variety of methods for dispersing birds using static, pyrotechnic, bioacoustics, and depredation equipment. Any or all of these may be used at NASJAX and NOLF Whitehouse to control bird locations. The BDDT is specially trained in the use of this equipment.

(1) Static Deterrent Devices. Static deterrents include, but not limited to propane cannons, scarecrows, silhouettes, and effigies. They are often very effective in bird deterrence. Static devices are designed to augment the activities of the bird dispersal teams. At no time should static deterrents be considered a replacement for dispersal teams. The BDDT should move static devices 50-100 feet from their existing locations. This activity will inhibit the decline in their deterrent effect occurring as wildlife become accustomed to the device.

(2) Propane Cannons. The USDA Wildlife Biologist and Airfield Manager will position and operate the propane sound cannons. Locations will be randomly changed to avoid habituation by the birds. At a minimum, one cannon each will be placed at the runway approach and departure ends.

(3) Bioacoustics. Bioacoustics is audio taped distress or predator calls of actual birds. Special care must be taken to play the tape in short intervals to prevent habituation by the birds. Birds should respond by taking flight or becoming alert. These calls are effective for waterfowl, gulls, songbirds and shorebirds. Pyrotechnics should be used in conjunction with bioacoustics to enhance complete dispersal.

(4) Pyrotechnics. Pyrotechnics are effective for dispersing most bird species and should also be used for coyotes, deer and other animals. Pyrotechnics may include a variety of devices similar to commercial fireworks, including bangers, whistlers, screamers, and salutes. These small but very loud firecrackers are shot into flocks or near individual animals to frighten them away when they are discharged. Proper safety precautions shall be followed to ensure personnel safety.

(5) Lethal Control (Depredation). Occasional depredation of birds reinforces the other methods of dispersing birds. Depredation shall be in

accordance with Federal Fish and Wildlife Permit. USDA Wildlife Services and select Air Operations personnel are authorized to take birds, provided the requisite qualifications for weapons handling/discharge are met.

Note: USDA Wildlife Services and select Air Operations personnel shall maintain and store in an approved gun safe, shotguns, pellet rifle, .22 pistol and pyrotechnics appropriate for the depredation of birds. All individuals shall similarly obtain and store non-lead ammunition appropriate for the depredation of birds. Lethal means are only authorized to be carried out by USDA Wildlife Services or person(s) designated by the Air Operations Officer.

f. Active Dispersal Procedures. The key to bird dispersal is perseverance. The BDDT shall maintain and use pyrotechnic and bioacoustics devices during daily airfield inspections to keep birds from congregating in the vicinity of the airfield to include the taxiways, runways and parking ramps. Extreme care must be exercised to ensure birds are driven from the path of the oncoming aircraft rather than towards them. Designated personnel will execute the following actions:

(1) Coordinate bird reduction efforts and maintain close liaison with the Public Works Office. The USDA Wildlife Services, BASH Program manager or NASJAX Airfield Manager will represent the BDDT when notifying the Public Works Office of BASH information.

(2) Prior to initiation of dispersal actions, designated personnel will coordinate the location and methods with the ACTFO or Tower Supervisor and ensure that BHC RED has been declared prior to dispersal activities on the duty runway.

(3) Horns, noise makers, or distress calls should be used before pyrotechnics to disperse birds.

(4) Pyrotechnics should be used in conjunction with distress calls. Pyrotechnics consist of screamers, whistle bangers, and cracker shells.

(5) Place and periodically move propane sound cannons around the airfield to prevent habituation.

(6) If the methods above do not work or the birds become accustomed to the hazing, it may become necessary to remove several birds via lethal control to reinforce the dispersal methods. Personnel should contact the USDA-Wildlife Services or the Air Operations personnel to conduct lethal control when required.

(7) When the target flock or problem birds are dispersed, the ACTFO or Tower Supervisor shall be notified so the BHC can be lowered.

g. Passive BASH Controls. One of the most effective and permanent methods of discouraging birds from using the airfield is the removal of attractive habitat features. Passive control methods are described below. Although effective, budget restrictions may preclude incorporating all of

these measures. Implement land management procedures when funding and manpower resources are available.

(1) Managing Grass Height. Mow to maintain a uniform grass height between 7 and 14 inches. Long grass discourages flocking species because reduced visibility disrupts inter-flock communication and prevents predator detection. When grasses do not naturally achieve at least 10 inches in height they should be encouraged to do so. Grass heights in excess of 14 inches may attract rodents and will also result in the grass laying flat (lodging) thus reducing its deterrent effect to flocking species. Grass heights below 7 inches are of equal concern, as they are generally more attractive to birds that feed on the easily accessible worms and insects. Begin mowing adjacent to runways and finish in the infield or outer-most grass areas. This will cause insects and other animals to move away from aircraft takeoff and landing areas. Cutting grass before it goes to seed will discourage seed eating birds.

(2) Controlling Broad-leafed Weeds. Keep broad-leafed weeds to a minimum on the airfield. Apply herbicides as necessary for control. Broad-leafed weeds attract a variety of birds, may produce seeds or berries, and may limit grass growth. Obtain assistance in herbicide selection for weed control, appropriate grass seed selection, fertilization and erosion control vegetation from the Naval Facilities Engineering Command (NAVFAC), Professional Pest Management Consultant (PPMC), U.S. Soil Conservation Service or the Agricultural Extension Service.

(3) Fertilizing. Selectively stimulate grass growth to promote a uniform cover at 7 inches to 14 inches in height. Irrigation may be required to support turf growth.

(4) Removing Edge Effect. Maintain the airfield as uniformly as possible to reduce the transition zone between two distinct habitat types (e.g., brush to grassland).

(5) Leveling of Airfield. Fresh water is one of the most important airfield bird attractants. Level or fill high and low spots to reduce attractiveness to birds and prevent standing water.

(6) Removing Dead Vegetation. As soon as possible, remove dead vegetation such as brush piles and the cover it affords.

(7) Removing Bird and Animal Carcasses from the Airfield. This is to avoid attracting scavengers that feed on them. Forward remains, which may have been caused by collision with aircraft, to the USDA Biologist assigned to NS Mayport for Identification.

(8) Pest Control. Invertebrates and rodents are key food sources for many birds. Periodically survey and reduce these pests when required. Pesticides and traps can reduce pest populations. Only pesticides registered by the EPA and the State of Florida and approved by NAVFAC and PPMC are authorized. All pesticides must be used in strict accordance with label instructions and all pest management operations must comply with the NASJAX

Integrated Pest Management Plan and Integrated Natural Resources Management Plan. Inspection and control should begin early in the spring.

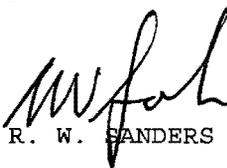
(9) Maintaining Drainage Ditches. Airfield personnel shall regularly inspect ditches to ensure they are kept clear. Airfield personnel should contact the Public Works Department and the USDA Biologist to maintain ditch sides to discourage wading birds and emergent vegetation and to improve drainage as necessary to inhibit even temporary ponds or puddles.

(10) Eliminate Roosting Sites. Control roosts by vegetation management of roost sites where possible.

h. Record Keeping. Bird activity information compiled over several years or seasons may help develop a more effective BASH program. The BDDT will maintain BASH activity logs. These logs will document all bird dispersal operations to include date, time, species, location, methods, bird activities, and number of birds dispersed. The USDA Wildlife Biologist shall provide as much information concerning bird migratory activity as can be obtained through contacts with the U.S. Fish and Wildlife Service, U.S. Air Force BASH Team and local study groups. This information shall be shared on a monthly basis with Air Operations. Data will be summarized quarterly and presented during the Bird Hazard Working Group meeting.

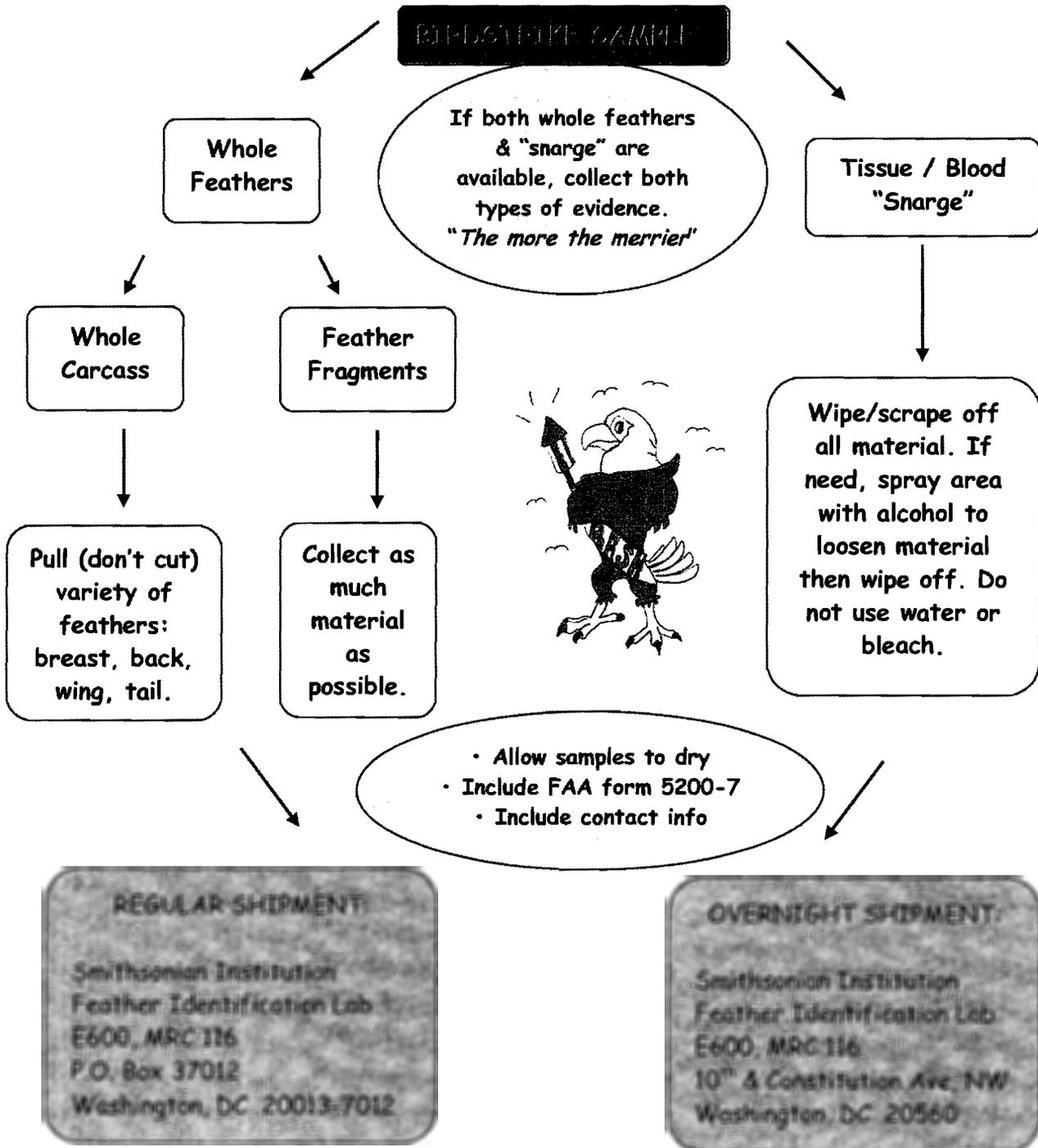
i. Bird Strike Reporting/Remains Collection. Bird strike reporting is an important part of the BASH program. It is the responsibility of the aircraft reporting custodian to report bird strikes via a WESS report IAW reference G. Reporting custodians shall also notify the NASJAX Air Field Manager (904)542-3176 or Operations Duty Officer (904)542-2511 of the bird strike. The reporting custodian is responsible for collecting any remains (flesh and/or feathers) IAW reference H. All BASH Kits or remains should be brought to the NASJAX Airfield Managers Office (Building 666) in order to verify the species of bird involved. NASJAX BASH Program Manger is responsible for the remains after delivered by the reporting custodian. NASJAX BASH Program Manager will ensure remains are forwarded to the Smithsonian Institution as required. All bird strikes and WESS reports should be addressed at BWG meetings.

9. Applicability. This instruction applies to all NASJAX Departments and all tenant commands and activities.


R. W. SANDERS

Distribution:
(NASJAXINST 5605.1KK)
List J-1
List X-1

HOW TO COLLECT BIRDSTRIKE EVIDENCE



General Information for Collecting Birdstrike Material

Feather Identification Lab, Smithsonian Institution

COLLECTING REMAINS

Feathers:

Whole Bird: Pluck a variety of feathers (breast, back, wing, tail)

Partial Bird: Collect a variety of feathers with color or pattern

Feathers only: Send all materials

Do not cut feathers from the bird (we need the down at the base)

Do not use any sticky substance (no tape or glue)

Place remains in a re-closeable bag

Allow remains to dry before sealing bag.

Blood / Tissue ("Snarge"):

Place dry snarge in a re-closeable bag

If need, wipe off with alcohol wipe or paper towel sprayed with 70% alcohol

Please do not use water or bleach – it is not compatible with our dna analysis

- Include copy of FAA 5200-7 report
- Include contact information

SHIPPING

Routine / Non-Damaging Cases: *US Postal Service*

Feather Identification Lab

Smithsonian Institution

NHB E600, MRC 116

P.O. Box 37012

Washington, DC 20013-7012

Priority / Damaging Cases: *Overnight Shipping*

Feather Identification Lab

Smithsonian Institution

NHB, E600, MRC 116

10th & Constitution Ave., NW

Washington, DC 20560-0116

WEBSITES

Civil Aviation: <http://wildlife-mitigation.tc.faa.gov>

Birdstrike Committee: www.birdstrike.org

Feather Lab Contact Information

202-633-0801

dovec@si.edu

heckerm@si.edu

"MAKE-YOUR-OWN" - BIRDSTRIKE COLLECTING KITS

Birdstrike Collecting Kits are cheap to make and easy to assemble. Having pre-made kits available improves birdstrike reporting and encourages the sampling of birdstrike remains. Most folks assemble the contents into individual bags or envelopes and keep a supply in field vehicles or office supply cabinets for quick access. Below is a list of recommended items to include in your birdstrike collecting kits; mix and match as budgets permit:

Re-sealable Plastic Bags

A variety of sizes; Re-sealable bags help contain liquids and keeps odors to a minimum.

Sharpie Markers

Permanent markers are water resistant and used for writing data (date, time, aircraft, etc) directly on the bag of remains.

Alcohol Wipes

Pre-packaged alcohol hand-wipes can be used to wipe "snarge" off aircraft. Alcohol is better than water at preserving DNA, preventing mold growth, and is more sanitary for humans. Alternatively, use a spray bottle with 70% alcohol to spray the area before wiping with paper towels. Do not use bleach wipes, it destroys DNA. .

Miscellaneous Items for Birdstrike Collecting

Kitchen shears - good for cutting feet, wings, bills

Tongue depressors, tweezers, cotton swabs/cotton-tipped applicators

Hand cleaners, or other alcohol based gel hand sanitizers.

FTA® DNA collecting cards: If you send a lot of blood/tissue ("snarge")

samples for DNA identification, you may want to look into getting Whatman FTA® DNA cards. The material is sampled with a sterile applicator and placed onto the surface of the card that "fixes" the dna in the sample. For more information on ordering these items contact the Feather Lab.

Note: If you only occasionally send blood/tissue samples - a paper towel with alcohol, or alcohol wipe is still a good option for blood/tissue samples.

Extra Safety Items

Latex Gloves

Protective Eyewear

Face masks: If avian flu is a concern, the Center for Disease Control recommends NIOSH rated N95 face masks. (These may be referred to as respirators.) There is a disposable version of these masks by 3M that looks similar to the regular "cup" style face masks.

Reminders

Always encourage proper hygiene & provide personnel easy access to cleaning/hygiene supplies

Do not cut off the fluffy down at the bottom of feathers

Do not use bleach on samples

Be sure personnel are briefed on proper carcass disposal protocols

Stay informed to the status of HPAI H5N1 avian flu virus. The following website has excellent coverage:

The American Ornithologists' Union Ornithological Council

<http://www.nmnh.si.edu/BIRDNET/OC/avianinfluenza.html>

Contact Information

Feather Identification Lab

Carla Dove

Marcy Heacker

202-633-0801

dovec@si.edu

heackerm@si.edu

(rev 11/07 mhs)