BY ORDER OF THE COMMANDER
35TH FIGHTER WING

35TH FIGHTER WING INSTRUCTION
91-212

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Safety
BIRD/WILDLIFE AIRCRAFT
STRIKE HAZARD (BASH) PROGRAM

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This instruction provides a base program to minimize aircraft exposure to potentially hazardous wildlife strikes. It implements AFPD 91-2, Safety Programs, DAFI 91-202, US Air Force Mishap Prevention Program and DAFI 91-212, Bird/Wildlife Aircraft Strike Hazard (BASH) Management Techniques. This instruction applies to all host, associate, and TDY organizations on Misawa AB. 35 FW/SEF is the OPR for this instruction and will complete an annual review by 1 April. The 35 FW/CC is responsible for implementation of this instruction.
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SUMMARY OF CHANGES

document has been revised in its entirety and should be completely reviewed. It incorporates multiple format changes for ease of use and currency. Changes include designation of a BASH program manager (s) and their qualification (s), defines vegetation management as a military readiness activity as defined in Unified Facilities Criteria (UFC) 3-260-01, insecticide application, and clarification on mandated wildlife hazard assessments and formal surveys

Chapter 1

GENERAL INFORMATION

1.1 Overview. This instruction applies to the BASH program operations of manned and unmanned aircraft, remotely piloted aircraft (RPA), and small unmanned aircraft systems (sUAS) operating on Misawa Air Base (MAB). Aircraft collisions with wildlife cause millions of dollars in damage annually resulting in the potential loss of combat capability, safety of aircrews, and damage/loss of aircraft. Damage to airfield infrastructure by burrowing animals degrades airfield surfaces, presenting additional hazards. Wildlife strike hazards to aircrew and aircraft (as well as operations and maintenance expenditures) may be significantly reduced by utilizing an integrated program will follow the Sikes Act, Sec. 670a., Section 101, Cooperative Plan for Conservation and Rehabilitation, Department of Defense Instruction (DoDI) 4715.03, Natural Resources Conservation Program, and Department of the Air Force Manual (DAFMAN) 32-7003, Environmental Conservation for wildlife conservation consistent with the intended use of the military installation subject to aviation safety requirements.

1.2 Introduction. A bird/wildlife aircraft strike hazard exists at Misawa Air Base (MAB) and its vicinity due to resident and migratory bird species and other wildlife. Daily and seasonal bird movements create various hazardous conditions. This plan establishes procedures to minimize the hazard to US Air Force, United States Navy, Japan Air Self Defense Force, and Japan Air Lines, and all deployed aircraft at the installation and in their operating areas. This plan updates existing documents and is based on the current Bird/Wildlife Aircraft Strike Hazard (BASH) Plan, historical bird/wildlife strike records from Misawa AB and surrounding operating areas, Staff Assistance Visit reports from the USAF Safety Center BASH Team, and the summer 2023 visit by PACAF/SEF. This instruction establishes a program to minimize wildlife strikes. It delineates Misawa's Wildlife Exclusion Zones for wildlife management purposes and defines Vegetation Management Zones designed to make Misawa unattractive to wildlife. Furthermore, it defines unit BASH responsibilities and outlines procedures for issuing bird conditions and reporting bird strikes.

1.3 Responsibilities. 35th Fighter Wing, Flight Safety (35 FW/SEF) shall mange the overall BASH program as well as primary BASH detection and dispersal agency at Misawa AB. In addition to BASH management, dedicated wildlife surveys will also be conducted, to include point count, mobile count, and small and large mammal surveys. The surveys per DAFI 91-212 guidelines, are to record and assess temporal and spatial airfield/Base use by wildlife, along with behavior, abundance, and diversity of species. The review of additional survey data along with control data, can assist with gauging the BASH programs effectiveness, and if needed, adjusted to correct any deficiencies. Airfield Management Operations (AMOPS) shall implement dispersal efforts if 35 FW/SEF is not immediately available. 35th Civil Engineering Squadron (35 CES) is responsible for habitat management and overall wildlife management within Misawa AB property. 35 CES Natural Resources manager serves as an additional advisor for the Misawa AB BASH program.

1.4 Phases of Operation. This plan contains two phases of operation: Phase I and Phase II.

1.4.1. Phase I concentrates on wildlife control and habitat modification and is in effect year-

round. Phase II concentrates on bird avoidance using operating restrictions and increased dispersal efforts. Misawa and its associated military operating areas, ranges, and low-level routes are located near or within primary migration routes. Historical bird migratory patterns are used to determine Phase II periods. Phase II periods are typically Apr thru May (spring migration) and typically Oct thru Nov (fall migration). These periods are subject to change based on weather and additional variables. 35 FW/SEF shall coordinate to determine if Phase II operations should begin or end on different dates.

1.4.2. During BASH Phase II, all MAB personnel associated with flight operations should be extra vigilant for bird/wildlife activity and immediately report these observations to Airfield Management (35 OSS/OSAA), at DSN 226-3110. Additionally, the 35 FW Supervisor of Flight (SOF) and AMOPS are strongly encouraged to increase the Bird Watch Condition (BWC) during expected/observed hazardous conditions. Low levels and night flying are recommended to be avoided or kept to a minimum during BASH Phase II periods

1.5. Environment. Misawa AB is located approximately 400 miles north of Tokyo and is bordered by Misawa City to the south and east, the Shiminnomori Park to the north, and Lakes Ogawara and Anenuma to the west and northwest. MAB also manages Draughon Range (DR), a Geographically Separated Unit (GSU) gunnery and bombing facility. Misawa AB has a joint-use runway, servicing military and civilian aircraft, and covers approximately 3,921 acres (1,586.8 ha), with DR covering an additional 1,889 acres (764.5 ha). DR is located about 11½ miles (18.5 km) north of Misawa AB and has the Pacific Ocean approximately two miles to the east and the Takase River on the west that flows into Lake Ogawara. Due to the geological demographic of MAB and DR, bird and wildlife aircraft strike hazards are prevalent.

1.6. Airfield. The airfield turf is a mixture of grasses.

1.6.1. Sweet Vernal – fine, hairlike leaves with a sweet vanilla-like fragrance. Can be invasive, difficult to control, provides cover for small animals such as rodents and birds while seeds are consumed by deer, rabbits and birds.

1.6.2. Species of Rabo de Gato – “Cat Tail Grass”, difficult to get rid of, used for many industries, food source for predatory insects and mites.

1.6.3. Chinese Silver Grass – clump-forming ornamental grass with feather plumed seed heads, spreads rampantly, leaves through the winter and may produce hundreds of scattered seeds. Attracts mealybugs, birds and butterflies.

1.6.4. Green Bristlegrass – weedy and aggressive annual grass. Forged on by small mammals and grazing animals.

1.6.5. Zoysia Grass – used on golf courses to create fairways and teeing grounds. Attracts cinch bugs and hunting billbugs.

1.6.6. Orchard Grass – the primary use is for forage production. It is highly palatable to deer, attracts Japanese and green June beetles and sawflies.

1.7. Airfield Fence. The airfield is surrounded on one side with chain link fence. The lack of fencing around the airfield provides no deterrent for wildlife entering the area. It has been surveyed that larger wildlife enter and leave the airfield openly to carry out instinctual activities.

1.8. Wetlands. Outside of the Aircraft Operations Area, but within the installation boundary

there are multiple water holding ponds as well as marshy coastline. These areas include two bodies of water on the west approach end, the Base Beach area, a shallow canal connecting Lake Ogawara and Lake Anenuma and a holding pond to the northeast of the airfield. These areas and areas outside of the base boundary attract a wide variety of waterfowl, gulls, shorebirds and other species.

1.9. Hazards. The hazard severity varies with the seasonal changes and variety of resident and migratory bird species and other wildlife. MAB is located directly in the path of three major bird migratory routes: the Sakhalin route from Siberia, the Kurils route through the Japanese mainland, and the Sea of Japan route west of Misawa. Furthermore, Lake Ogawara and Lake Anenuma attract approximately 100,000 migratory birds and animals each spring and fall. The Pacific coastline furthers the influx of coastal birds. Additionally, small animals such as foxes, voles, and mice are plentiful on and around the airfield. The damage potential to an aircraft from these hazards range from minor to severe and/or catastrophic.

1.9.1. Raptors and Hawks. During the summer months raptors and hawks are very active on and over the airfield, specifically the Black Kite. The Black Kite is the most numerous raptors in the world weighing 1.5-2 pounds. They are scavengers/insectivores with weak predatory behavior. Typically, their flying behavior mimics that of a vulture, soaring and scavenging over the airfield at several hundred feet above ground level (AGL). The Black Kite has non-obligatory perching behavior and will occasionally perch on the ground or close to, to rest. They do not fly in large flocks; however, during fall migration, become gregarious and forms a "family" or thermal. Misawa is also the home of ospreys, kestrels and others from the raptor and hawk family.

1.9.2**.** Corvids. The crows (Japanese Crow or Jungle Crow) on Misawa AB are medium sized with robust beaks and a rounded forehead. This bird is highly intelligent and excels in a variety of habitats due to its adaptive nature and use of problem-solving skills to perpetuate its omnivore diet. Large murders appear on the airfield year-round foraging in transit to an off-base garbage dump (30 miles north) and their roost on a daily cyclic pattern.

1.9.3. Wading birds. Grey Herons are a large bird standing up to 40 inches (100 cm) tall and ranging from 2-4.75 pounds. Herons are apex predators in the aquatic ecosystems feeding on fish, insects and crustaceans in shallow water. They occasionally take small mammals such as voles, rats and young rabbits. Grey Herons feed at any time day or night but are most active at dawn or dusk and transit the airfield while foraging. and with their coloring, visual avoidance can be challenging. Grey Herons are year-round residents of Misawa that breed in the spring building their nests in high trees. Other wading birds that are native to Misawa are Pratincoles, Coursers, Storks, and Egrets.

1.9.4. Ducks and waterfowl. A concern during migratory seasons in the fall, winter and spring. Spot-billed Ducks and swans reside around Misawa AB through the year. Spot-billed ducks are a medium sized (22-25 inches, 1.5-3.3 pounds) dabbling duck identified by its dark stripe across the scalp, white stripe above its eye and black spot on the tip of its bill. They are a freshwater bird feeding for plant food mainly in the evening. Flocks ranging from 20-30 ducks are found flying over the northeast end airfield or in the small pond north of the airfield. The swans are large birds (55-65 inches, 16-31 pounds) and require large bodies of water to live in. Swans mate for life and keep their offspring with them during the winter months making their flocks and more prevalent. Their preferred breeding habitat is wetland and will build close to water

making Draughon Range a preferred area and presenting a severe bird strike hazard to aircraft at low levels. Other waterfowl around Misawa are Eurasian Wigeon, Pochard, and Pintail.

1.9.5. Japanese Serow. Japanese Serow is a goat-antelope found in the dense woodland and is considered a "Special Natural Monument" in Japan. The serow are diurnal feeding during the early morning and late afternoon on leaves, shoots and acorns, then sheltering in caves and under rock ledges the rest of the day. They have a stocky body (28-33 inches, 66-110 pounds) with sensitive hearing and strong eyesight and is an agile, sure-footed mountain dweller. The Japanese serow is a solitary mammal that lives in small, discrete home ranges for most of the year, and is territorial. Due to its protected status all operations that involve the serow, will be limited. The serow poses a risk to flying operations due to their size but may pose a higher threat to personnel due to their territorial nature.

1.9.6. Other Wildlife (Rabbits/Foxes). Rabbits are not a significant hazard to aircraft but often attract raptors. Proper grass management is used to reduce the numbers of these animals on the airfield. Foxes are normally about the size of a dog and prey on mice and rabbits. This has the overall effect of reducing food sources for raptors. While foxes can present a hazard to aircraft, they are considered beneficial in small numbers. When deemed necessary, these animals can be trapped and relocated off the airfield. All non-avian wildlife identified on the airfield will be trapped and released if possible. If the animal is identified as an immediate threat to the safety of flight it may be depredated. Contact Entomology (DSN 226-4257) concerning trapping procedures.

Chapter 2

RESPONSIBILITIES

2.1. Specific Responsibilities. This list is not all-inclusive and should be tailored as necessary.

2.2. The 35th Fighter Wing Deputy Commander (35FW/CD) or: Designated representative, chairs the Bird/Wildlife Hazard Working Group (BHWG) and is the approval authority for its recommendations.

2.3. The 35th Fighter Wing Command Post (35 FW/CP) shall:

2.3.1. Notify inbound aircraft who contact CP of any Bird Watch Conditions (BWC) above LOW. Include location, movement, and other known data of the bird activity driving the BWC.

2.3.2. Relay Bird Waring Reports/PIREPS to SOF

2.4. The 35th Fighter Wing Public Affairs office (35 FW/PA) shall:

2.4.1. Participate as required and upon request will provide a public information program designed to inform base personnel, dependents, and the general public on the hazards and costs of uncontrolled bird activity and the measures being taken to minimize them.

2.4.2. Provide photographic services to document bird/wildlife strikes and related activities that cause damage equal to or greater than that of a Class B mishap.

2.4.3. Provide graphic support to publicize bird/wildlife hazards and actions taken to minimize them.

2.5. The 35th Fighter Wing Flight Safety Office (35 FW/SEF). The Flight Safety Officer (FSO) and/or the Aviation Safety Non-Commissioned Officer (AvNCO) manages, implements and executes the BASH program using the document as a guide and shall:

2.5.1. Is the Office of Primary Responsibility (OPR) for this instruction. The BASH Program Manager will ensure this instruction is reviewed and/or revised annually.

2.5.2. Ensure the 35th Fighter Wing BASH Abatement Team personnel are BASH dispersal qualified.

2.5.3. Maintain BASH data for distribution upon request.

2.5.4. Cooperate with host, tenant, TDY and partner units on all bird strike reports and remains collection. Forward remains to the Smithsonian (as required) In Accordance With (IAW) DAFMAN 91-223, *Aviation Safety Investigations and Reports*, and reports are finalized in Air Force Safety Automated System (AFSAS).

2.5.5. Coordinate with 35th OG/OGV and Airfield Management (AMOPS) to announce Phase II operations.

2.5.5.1. BASH Phase I – Dates not designated as Phase II

2.5.5.2. BASH Phase II – Declared during predicted migratory surge periods, typically April to May and October to November. Ensure Notice to Airman (NOTAM) is published announcing

the start and end of Phase II and a digital copy of the read file is provided. OGV will work with SEF as required to publish a Safety Read File implementing BASH Phase II.

2.5.6. Ensure aircrew(s) are briefed on bird strike hazards prior to Phase II periods through means such as Flight Safety Meetings, step briefs, of FCIFs. Ensure bird strike hazards and reports are briefed periodically during Flight Safety Meetings.

2.5.7. Serves as the BHWG Coordinator.

2.5.7.1. Schedule BHWG meetings, publish meeting minutes, prepare meeting briefs. BHWG meeting minutes will be maintained for minimum of three years.

2.5.8. Ensure sufficient copies of AF Form 853, *Air Force Bird Strike Report,* are available in the Fighter Squadron, debrief, Fighter Generation Squadron and AMOPS.

2.5.9. Consider all sources for improvement of this program. Attendance at national and international BASH conventions and committees should be highly considered annually. Opportunities are listed on the AFSEC BASH website.

2.5.10. Review this instruction IAW DAFI 91-202 and execute self-inspection checklist annually.

2.5.11. Provide guidance, when requested, on collection of bird/wildlife remains for identification. Reference the AFSEC BASH website and Technical Order (T.O) 1-1-691 for the latest collection and cleaning methods.

2.5.12. Request funding to support BASH programs, i.e. training, equipment purchases and maintenance, conference attendance, etc.

2.5.13. Ensure all members of the BASH team are trained appropriately to include the Scare Wars system, bird dispersal/depredation and other annual training requirements.

2.5.14. Maintains appropriate maps and charts.

2.6. The 35th Operations Group Commander (35 OG/CC). The 35 OG/CC shall issue specific guidance for aircrew, Supervisor of Flying (SOF), and AMOPS on procedures to avoid areas and times of known hazardous bird concentrations, mission permitting.

2.6.1. Declares, disseminates, and terminates BWC for 35th Fighter Wing flying operations and suggests BWC for TDY and tenant/partner units, on installation, training areas and deployed locations through the SOF, or designated representative.

2.6.2. Issues specific guidance for aircrews and SOFs on procedures to be followed under BWC.

2.7. The 35th Operations Group Standardization and Evaluation (35 OG/OGV) shall:

2.7.1. Ensure bird/wildlife hazard awareness and the BASH program is briefed to all TDY personnel.

2.7.2. Incorporate coverage of this instruction for all SOFs during initial and recurrent SOF training.

2.8. The 35th Fighter Wing Supervisor of Flying (SOF). The SOF has the responsibility to conduct airfield inspections and direct BASH/dispersal personnel, when necessary. The SOF shall:

2.8.1. Declare a BWC when there is a visual observation of bird activity on or near the airfield,

when aircraft relay bird hazard information, or when any personnel or agency on or near the flightline relay observations to the SOF.

2.8.2. Notify departing and arriving 35th FW flights of the BWCs if they check in on SOF frequency.

2.8.3. Obtains and posts current bird activity data and ensures it is readily available for aircrew briefings. Advises each crew of the BWCs at the airfield and training areas (if available).

2.8.4. Utilize the BASH Survey Grid Map to direct dispersal team to areas on the airfield with wildlife activity.

2.8.5. When changing the BWC, the SOF will notify AMOPS and the Tower watch superintendent. The SOF will report to AMOPS with the location and nature of any known bird hazards. AMOPS will notify the 13th and 14th Fighter Squadron operational desks (226-1313/1414) and 35 FW/SEF.

2.8.6. SOF Report. The 35 FW SOF will record significant bird/wildlife activity on the daily SOF report and email a copy of the report to the 35 FW/SEF org box at 35FW.SEF@us.af.mil. SOF reports should include any BWC changes, reported or observed bird strikes, significant bird activity and any activation of the dispersal team.

2.9. Airfield Management (AMOPS) (35 OSS/OSAA). Has the responsibility to conduct airfield inspections and direct BASH/dispersal personnel, when necessary. AMOPS will:

2.9.1. Advise the SOF of bird activity observed on or near the airfield or in the traffic pattern.

2.9.2. Recommend changes of a BWC to the SOF when there is a visual observation of bird activity on or near the airfield, when aircraft relay bird hazard information, or when any personnel or agency on or near the airfield relays observations.

2.9.3. If no SOF is on duty, declare a BWC commensurate with observed bird activity on or near the airfield, when aircraft relay bird hazard information, or when personnel or agencies on or near the flight line relay observations. Advise Japanese Air Self Defense Force (JASDF) Base Operations (BOPS) to advise Air Traffic Control (ATC) and BASH/dispersal personnel of changes in BWC.

2.9.4. After being notified the BWC has changed, pass the updated information to the CP and tenant/partner flying units.

2.9.5. Monitor bird/wildlife population, grass height, and standing water within the airfield area and report problems to the appropriate OPR for modification or elimination.

2.9.6. Ensure detections and dispersal teams are dispatched to the location of the birds creating the hazard.

2.9.7. Notify 35 FW/SEF for identification and disposal of wounded/depredated birds/wildlife.

2.9.8. Ensure all AMOPS personnel review this instruction.

2.9.9. Retain annual qualifications and proficiencies on BASH pyrotechnics and any other depredation/harassment tools.

2.9.10. Conduct runway checks anytime a bird strike is reported in the vicinity of the runway.

2.9.11. Provide secure storage of BASH equipment.

2.9.11.1. Assist 35 FW/SEF in maintaining and accounting for all bird/wildlife dispersion equipment (i.e. shotguns, ammunition, pyrotechnics). Ensure that this equipment is properly stored and handled.

2.9.12. Provide initial response to wildlife threats on the airfield for both preventive and reactive methods. Take active measures during all periods of BWC Moderate or Severe to reduce bird/wildlife hazards including activation of dispersal team.

2.9.13. Operate Scare Wars System IAW this instruction and inputs from SEF. Fire the BASH cannons on hour before first takeoffs, during runway changes, and throughout the day as required. Coordinate with Misawa Ground for authorization/use of cannons prior to activation. Coordinate with SEF to move cannons as needed for effective bird deterrence and notify SEF when it is apparent that birds are no longer responding to the cannons.

2.19.14. Conduct a minimum of three (3) daily BASH inspections. At least on inspection should be conducted during peak raptor activity. Document any activity in the AF Form 3616, even if no deterrent action was taken.

2.19.15. Act as an information collection and reporting point of contact for bird/wildlife strikes and hazards. Make timely reports of this information to the 35 FW/SOF and the 35 FW/SEF. Notify the 13/14 FS Ops desks, JASDF Base Ops, Naval Air Facility (NAF) Misawa of BWC changes on the airfield and at Draughon Range.

2.19.16. If any remains are discovered on or near the runway not the approximate location, place remains in a plastic bag and coordinate pickup or drop-off with 35 FW/SEF.

2.10. Squadron Assigned Flight Safety Officers (SAFSO) shall:

2.10.1. Brief aircrews to promptly report all bird/wildlife strikes and hazardous conditions as per this instruction.

2.10.2. Ensure all applicable bird activity data is readily available to aircrews during mission planning.

2.10.3. Make seasonal bird hazards a regular topic at flying safety meetings

2.10.4. Make available any bird/wildlife activity data for TDY locations available prior to and during operations.

2.11. Aircrew shall:

2.11.1. Verify the BWC status prior to flight. Bird Hazards mitigation should be considered during mission planning and briefed to the flight. If available, aircrews should reference the bird avoidance model on the AHAS website.

2.11.2. Following a known/suspected bird/wildlife strike, aircrew should immediately advise ATC and/or the 35 FW SOF and land as soon as practical to have the aircraft inspected by maintenance personnel.

2.11.3. Caution should be exercised when conducting pattern work at airfield other than Misawa AB. Off-station bird activity should be secured prior to conducting pattern work. Other airfields in Japan may not have the same level of wildlife management/mitigation the Misawa does.

2.11.4. Promptly report all bird strikes and hazardous conditions to 35 FW/SEF or the units SAFSO as soon as possible. Anytime a bird or wildlife is struck, ensure an AF Form 853, *Air*

Force Bird Strike Report is completed and coordination with 35 FW/SEF to collect remains and strike information is initiated. Forms are available with the SAFSO, the safety bulletin board, the Flight Safety Sharepoint, and AMOPS.

2.11.5. If a strike is experienced while off-station aircrew is responsible for filling out the AF Form 853 and collecting remains. In lieu of the AF Form 853, aircrew may contact 35 FW/SEF or SOF via phone and pass the required information. For guidance on remains collection, contact 35 FW/SEF, DAFMAN 91-223, paragraph 9.2.3, or reference the Air Force Safety Center BASH website.

2.11.6. Pilot Reports (PIREPS) by aircrew and ground observations are essential to adequately assess and help identify bird and wildlife hazards on the airfield and in the local flying vicinity. When pilots spot birds or other wildlife, notify the controlling agency so other can be informed of the hazards. The following information should be relayed:

2.11.6.1. Location

2.11.6.2. Altitude

2.11.6.3. Local time of the sighting

2.11.6.4. Approximate number of birds and direction of flight

2.11.6.5. Wildlife type, species or size of bird, if known.

2.12. The 35th Maintenance Group, Commander (35 MXG/CC) shall:

2.12.1. Issue specific guidance to maintenance personnel for reporting hazardous bird/wildlife activity to Maintenance Operations Control (MOC) to report activity to SOF, AMOPS, SEF and BASH/dispersal personnel.

2.12.2. Issue specific guidance to maintenance personnel for reporting all bird/wildlife strikes discovered on aircraft to Quality Assurance (QA), SEF, and ensure the preservation of all remains. Even the smallest fragment of remains or blood should be forwarded for identification.

2.12.3. Ensure all aircraft cavities and uncovered openings are inspected prior to operation after undergoing prolonged maintenance, for birds or nesting materials.

2.12.3.1. Facility managers are responsible for purchasing and utilizing the equipment necessary to keep their buildings free of nests and attractants for birds/wildlife.

2.13. The 35th Mission Support Group Commander (35 MSG/CC) shall: issue specific guidance to assigned personnel concerning implementation of this instruction.

2.14. The 35th Civil Engineering Squadron Commander (35 CES/CC) shall:

2.14.1. Provide guidance and support for biological monitoring of wildlife populations and habitat management to improve technical advice for wildlife and vegetation management programs.

2.14.2. Advise Pest Management to coordinate with SEF for wildlife control within the Wildlife Exclusion Zone (WEZ) and notify of any activity observed.

2.14.3. Conducts and assists with habitat modification operations in accordance with this instruction.

2.14.4. Advises 35 FW/SEF of civil engineering projects that may impact airfield operations

related to bird and wildlife hazards.

2.14.5. Incorporate the following practices into the base Natural Resources Plan:

2.14.5.1. Grass height management. Grass heights of 7-14 inches are mandated by DAFI 91-202 within the airfield boundary. Mowing will be conducted when the average grass height reaches 12 inches or when seed heads begin to develop, whichever occurs first. Cutting the grass prior to seeding discourages flocking species from entering the airfield. Mowing will be done from inside out (closest to the runway to the furthest) to force insects and smaller animals to move away from the runway. To the utmost, coordinate mowing operations with periods outside of flying activity within the aerodrome.

2.14.5.2. Pest Control. Control of insects, earthworms, rodents, etc. will be accomplished with the use of pesticides under the supervision of the entomology office IAW AFMAN 32-1053, *Integrated Pest Management.*

2.14.5.3. Drainage ditches. Ditches will be inspected regularly and kept clear and obstacle-free. Ditch sides outside of the 300-foot distance from the runway centerline will be kept as steep as possible to discourage wading birds and emergent vegetation. Vegetation will be removed as often as necessary to maintain flow.

2.14.5.4. Weed control. Weeds and invasive flora will be kept to a minimum on the airfield with the use of herbicides.

2.14.5.5. Routinely seek the guidance and assistance of HQ PACAF concerning bird hazard reduction policies and guidelines.

2.15. The 35th Security Forces Squadron (35 SFS) shall: If warranted, inform Command Post (CP) of the use of any pyrotechnics or firearms during dispersal operations by BASH personnel upon notification to prevent false active shooter alerts and installation lockdown.

2.15.1 During normal perimeter fence checks, patrols will notify 35 FW/SEF at 315-226-2710 of any potential wildlife breaches that occur.

2.15.2. During normal perimeter checks damage to the fence is identified, patrol will notify CES to submit a workorder to prevent wildlife and unauthorized entry onto the installation and/or airfield.

2.15.3. Provide one (1) M870 Shotgun qualification course for minimum of seven (7) BASH personnel per quarter or as required.

2.16. Draughon Range (35 OSS/OSCX).

2.16.1. BWC Authority. Draughon Range controllers will declare BWC for Draughon Range in accordance with this instruction and other local guidance. Controllers will make full use of pilot assessments of bird activity when assessing BWC. If necessary, will recommend pilots check the pattern before tactical operations to thoroughly assess the BWC.

2.16.2. Reports. Report Draughon Range bird activity and changes in BWC to Airfield Management and the 35 FW/SOF and document significant bird activity in daily logs.

2.16.3. Discovered Bird Remains. In the event that bird remains are found and appear to have been struck by an aircraft, place remains in a plastic bag and coordinate to have the remains delivered or picked up by 35 FW/SEF. Or, if the bird was not struck by an aircraft, coordinate to

have remains delivered to or picked up by Pest Management.

2.17. Naval Air Facility (NAF) Misawa.

2.17.1. Provide a representative to the BHWG. Support the BASH program and comply with all local BASH procedures except where command or service guidance requires a different reporting process or more restrictive procedures.

2.17.2. Provide 35 FW/SEF with information on bird strikes that occur on any assigned, transient or deployed aircraft. A telephonic brief, email or AF Form 853 will be sufficient for data collection. Information from these reports will be used for data collection but will not be forwarded. Report potential hazards within the tenant unit's area to AMOPS or SEF.

2.17.3. Authorized as participants of the dispersal team when designated by the NAF Safety Office. Personnel will complete all required training as directed in this instruction.

2.18. Bio-environmental (35 OMRS/SGXB).

2.18.1**.** Oversees and tracks training requirements for Class 3B Laser Safety. Qualified members of the dispersal team will adhere to all Class 3B laser safety training referenced by OSHA, DAFI, ANSI and Bio-environmental publications that govern the use and training of assigned laser.

Chapter 3

TRAINING

3.1. Training. All base personnel will be briefed at newcomer's orientation brief by 35 FW Safety on the responsibility each individual has in reporting wildlife hazards, specifically Japanese Serow sightings to https://www.misawa.af.mil/Units/Public-Affairs/Community-Engagement/Japanese-Serow/.

3.2. Host Safety Office. 35 FW/SEF in conjunction with SAFSOs will maintain a bird hazard awareness program. Briefings, films, posters and other methods will be used to inform personnel about local bird hazards and reporting procedures.

3.3. Dispersal Personnel. 35 FW/SEF, Airfield Management personnel and trained BASH volunteer personnel will maintain BASH dispersal/depredation qualification to augment capabilities during peak migration periods. Volunteers must have the approval of their unit commander before volunteering to assist with dispersal/depredation operations.

3.3.1. Dispersal team personnel will contact 35 FW/SEF to schedule and accomplish the following requirements:

3.3.1.1. Complete SFS/CATM M870 shotgun qualification training annually

3.3.1.2. Attend formal training with 35 FW/SEF on the use of pyrotechnic devices and other dispersal methods annually. All personnel must be familiar with bird identification, wildlife deterrent procedures and training in the proper use of mitigation devises that are available to the dispersal team.

3.3.1.3. Complete BASH Dispersal Team Member training and any appliable CBT as currently defined by 35 FW/SEF.

3.3.2. BASH training records will be created and maintained by 35 FW/SEF. All training will be documented IAW DAFI 91-212.

3.3.3. Threatened and endangered animals will not be depredated. Dispersal members must be able to identify threatened and endangered animals prior to depredation. If possible, they will be harassed away from the point of interest. Exception: if threatened, endangered or protected species pose a known imminent and substantial danger to the safety of flight, they may be depredated IAW USFJ Environmental Branch Guidance, all other means of scaring the wildlife from the immediate area must be exhausted.

3.3.4. Accomplish Class 3B Laser Safety training. Training will be conducted by the LSO or designated representative at 35 OMRS/SGXB. Members requesting training shall accomplish an initial eye exam with 35 MDG.

3.3.5. Dispersal team members will obtain a flightline driver's license with Controlled Movement Area (CMA) access. Training will be conducted by units Airfield Driving Program Manager. If member cannot possess a flightline driver's license, they will be accompanied by a person who possess a license. Personnel possessing the license will maintain control of the vehicle and radio at all times.

Chapter 4

EXCLUSION ZONES

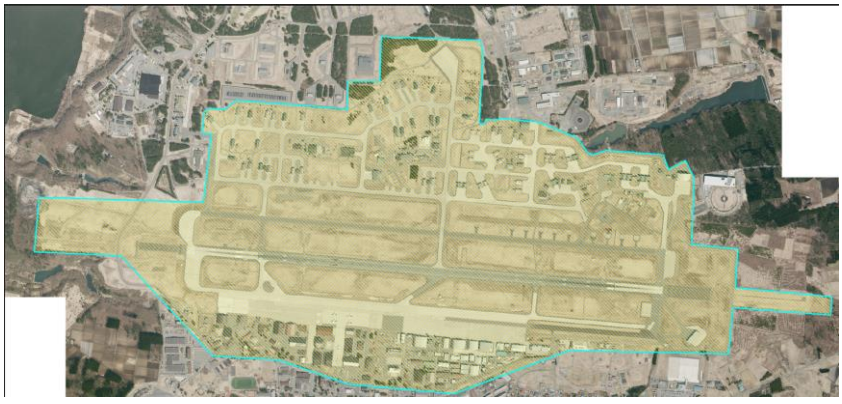
4.1. Exclusion zones. Boundaries are established by the BHWG to aid all agencies in defining where wildlife hazards exist, wildlife management priorities, and vegetation management goals. Misawa has three exclusion zones: airfield and maintenance area, Gosser Golf Course and Draughon Range. This section outlines the use and requirements of the maps and charts required to implement the BASH program. Flight Safety should maintain and update maps and charts as necessary. The exclusion zones cold change throughout the course of the season. Periodic habitat surveys should be conducted by the BASH Manager and Natural Resources to identify major habitat types and update maps based on these surveys as land uses and habitat conditions change. When a specific wildlife hazard is identified and the activity isolated, use the maps to determine if a specific attractant exists that can be altered within the scope of this plan. 35 CES will use maps as a guide for the long-range civil engineering program to reduce actual and potential hazardous environmental factors at Misawa Air Base.

4.2. Wildlife exclusion zones.

4.2.1. Airfield and maintenance area WEZ includes all runways and taxiways and the immediate surrounding area. Bird and wildlife activity in this area should be identified to AMOPS (226-3110). Wildlife in this area will not be tolerated and all means of mitigation will be used. Priority dispersal will be large birds or those with flocking tendencies, followed by smaller birds and mammals.

4.2.1.1. Boundaries. The physical boundaries of the airfield WEZ is the Entry Control Point (ECP) to the flightline area following the fence line from the west around to the northeast side by Juliet ramp, continuing to follow the south edge of Falcon drive on the east side of the airfield. The south edge is defined by the north edge of Falcon Drive E from Oki gate to the ECP. From the ECP on Falcon Drive E, the perimeter will be on the inside of the fence line along the south edge of the airfield to the edge of building 949. The southwest edge and western boundary are the running trail to the main flightline ECP.

Figure 4.1. Airfield WEZ boundary (yellow shaded area).



4.2.1.2. Gosser Golf Course is identified as a WEZ for harassment only. Due to its vicinity to the airfield and location in the local flying pattern, it has been established as a hazard. If a wildlife hazard in this area exists either to the flying mission or the populace 35 FW/SEF (226-

2710) and pest management (226-4257) will be notified for mitigation measures. Priorities will be large birds or those with flocking tendencies, followed by mammals and smaller birds.

4.2.1.3. Boundaries. The physical boundary for Gosser Golf Course WEZ is going to follow the "out of bounds" boundary along the outer edge of the holes.

Figure 4.2. Gosser Golf Course WEZ boundary (green shaded area).

4.2.3. Draughon Range is identified as a WEZ due to its classification and low-level flight patterns. Wildlife activity in this area will not be tolerated and all means of mitigation will be used. When a wildlife hazard in this area exists 35 OSS/RCO (226-9133) and SEF (226-2710) will be notified. Priorities will be large birds or those with flocking tendencies, followed by mammals and smaller birds.

4.2.3.1. Boundaries. The physical boundary for Draughon Range is the entirety of the fence line, and the water edge line on the east and west sides.

Figure 4.3. Draughon Range boundary (gray shaded area).

Chapter 5

HABITAT MANAGEMENT

5.1. Habitat Modification. By incorporating specific practices into the installation land management, Misawa Air Base can maintain an airfield habitat less attractive to birds and other wildlife. 35 CES is responsible for habitat modification and any recommendations to modify habitats beyond those presented in this document, must be coordinated with 35 CES prior to implementation.

5.2. Vegetation Management. Vegetation management will vary by zone.

5.2.1. Airfield WEZ is the area inside of the airfield perimeter boundary. A monotype vegetative environment is preferred in this area consisting of non-berry, brome, wheat grass, or non-seed producing grass. If a monotype environment cannot be achieved the use of herbicides will be considered to control the seeding and to target vegetative food sources for insects that can attract predators creating a hazard to aircraft operations. In additions, the use of insecticides is recommended within the aircraft movement areas. Insecticides should be sprayed at the appropriate instar stage of the prevailing inhabitant to minimize their attractiveness to birds. Any coordination to use pesticides and herbicides in the airfield zone will be coordinated with 35 CES Natural Resources and Pest Management.

5.2.2. Gosser Golf Course WEZ. The golf course is already a monotype vegetation environment and is maintained regularly. The use of herbicides and pesticides are not required for this WEZ but should be considered if the need arises. Continuous monitoring and modification of the habitat will be maintained to achieve a successful BASH program.

5.2.3. Draughon Range WEZ does not require modification due to the land use protocol. Continued habitat monitoring should be accomplished for this WEZ to ensure that modification is not required. The use of pesticides should be considered to lessen the attractants, consultation with 35 CES prior to use is required.

5.3. Managing grass height. 35 CES and the 35 FW BASH Manager are responsible for determine the timing of mowing and shall coordinate mowing with AMOPS during periods of low flight activity. Mowing withing the airfield perimeter should occur often enough to reduce rodent populations and nesting prior to nesting season. Mowing should be monitored to determine the best grass heights for deterring birds.

5.3.1. Grass Height. Airfield grass height will be maintained at 7-14 inches IAW DAFI 91-212 while making sure faster growing weeds are cut before they reach seeding stage to discourage seed eating birds from using the airfield.

5.3.2. Grass Mowing Cycle. The primary focus should be on the grass height and weed seed heads. Grass between 7-14 inches discourages flocking species from foraging on the airfield, because reduced visibility disrupts inter-flock communication and flock integrity by reducing the ability to detect predators. Grass exceeding 14 inches (36cm) will attract some bird species and rodents, which attracts raptors. The airfield should be mowed with the average grass height, not including seed heads, exceeds tolerances for grass height. Grasses produce prominent seed stalks; the height of these seed heads should not be the sole reason for mowing. Mowing to eliminate grass seeding will increase mowing cycles. Eliminating weeds and cultivating a uniform monoculture of grasses can be more effective in discouraging seed-eating birds from

feeding on the airfield than mowing grass seed stalks. Mowing should begin adjacent to runways and finish on the outer most grass areas. This causes insects and other animals to move away from aircraft takeoff and landing areas. Avoid mowing grass next to the runway and off the approach lights shorter than in other areas, all grass heights should be kept as uniform as possible throughout the airfield during mowing operations.

5.4 Managing shrublands. In general, a sterile environment on and around the airfield perimeter is preferred. Shrubs should be cut every year prior to ground thaw and before leaf-out to minimize its attractiveness to small mammals, songbirds and serows.

5.5. Seeding Bare Areas. Note that bare areas are attractive to birds as foraging and loafing sites, or to obtain grit. Eliminating bare areas on the airfield is accomplished through planting grass as necessary and maintaining irrigation. Such requirements should come at the behest of the BASH Manager who will generate a work order with CES. Seeding operations on the flight line will be a recommended seed mix as determined by Natural Resources and the BASH Manager.

5.6. Fertilizing. Select stimulate grasses to promote a uniform cover based on soil test results. Irrigation may be required to support turf growth for limited times, such as when establishing new cover.

5.7. Removing dead vegetation. As soon as possible, removed dead vegetation such as brush piles, grass clippings, etc., and the cover it affords.

5.8. Removing Dead Birds and Animals. Contact SEF or AMOPS to remove any wildlife remains from the airfield to avoid attracting wildlife, and to determine if they remains may have been caused by a collision with an aircraft or flightline vehicles and equipment.

5.9. Woodlands. Managing woodland density within the Airfield and Draughon Range WEZ can effectively discourage large birds or large concentrations of birds. Woodland withing the Airfield zone should be removed or greatly thinned to prevent Serows and other mammals from finding cover, to reduce raptor perches, and to prevent birds rooting or nesting near the airfield.

5.10. Bird-Proofing Buildings, Hangers, and Structures. 35 CES shall ensure that all new structures within the WEZ are designed to avoid attracting nesting and perching birds. These designs will minimize open vents, covered ledges, and graveled flat roofs where practicable based on need, economics and architecture. When a facility within the WEZ is repaired or renovated at or above 25% of the replacement value of the facility where practicable, bird proofing or structure removal is required to exclude nesting and perching birds. Vents or other openings in the buildings within the WEZ should be covered with ¼ or ½ inch hardware mesh to prevent nesting. Excluding birds from a structure they currently use will often displace them to an adjacent structure. Existing nest should be destroyed prior to egg laying. Facility managers are responsible for purchasing and utilizing the equipment necessary to keep their buildings free of nests.

5.10.1. Trapping/Removal. Trapping and removal of wildlife will be coordinated through Pest Management, AMOPS and SEF.

5.10.2. Design Features. Consider structures with the support features located on the outside of the building to reduce bird numbers. Consider the design when planning new hangars or other

structures.

5.10.3. Sharp Projections. Use in limited areas such as ledges, overhangs or small places where birds cannot be allowed. Expense prohibits their use over the entire structure.

Chapter 6

BIRD HAZARD WORKING GROUP

6.1. Bird Hazard Work Group (BHWG). The function of the BHWG is to collect, compile and review data on bird strikes, identify and recommend actions to reduce hazards, recommend changes in operational procedures, prepare informational programs for aircrews, and assist the commander by acting as a point of contact for bird/wildlife issues. coordinates activities between installation and tenant units to execute the 35 FW BASH Program. The BHWG also serves as a point of contact and coordination for JASDF, host nation agencies, tenant units and off-base entities and submit all recommendations to the 35 FW/CD for approval.

6.2. Composition.

6.2.1. CHAIRMAN. 35 FW/CD (Deputy Commander)

6.2.2. MEMBERS.

6.2.2.1. 35 FW BASH Program Manager

6.2.2.2. 35 FW/SEF (Wing Flight Safety)

6.2.2.3. 35 OG/CC (Operations Group CC)

6.2.2.4. 35 MXG/CC (Maintenance Group CC)

6.2.2.5. 13 FGS/CC (Fighter Generation Squadron CC)

6.2.2.6. 14 FGS/CC (Fighter Generation Squadron CC)

6.2.2.7. 35 MXS/CC (Maintenance Squadron CC)

6.2.2.8. 35 OG/OGV (Standardization and Evaluation)

6.2.2.9. 35 OSS/OSA (Air Traffic Control Liaison)

6.2.2.10. 35 OSS/OSAA (Airfield Management)

6.2.2.11. 35 OSS/OSA (Airfield Operations Flight CC)

6.2.2.12. 35 CES/CEIE (Civil Engineer Environmental Element)

6.2.2.13. 35 CES/CENMC (Project Management)

6.2.2.14. 35 CES/CEO (Civil Engineer Operations Flight)

6.2.2.15. 35 CES/CEN (Civil Engineer Community Planner)

6.2.2.16. 35 SFS/S4 (Security Forces Combat Arms Training and Marksmanship Unit)

6.2.2.17. JASDF ATC* (Japanese Air Traffic Control)

6.2.2.18. JASDF Base Ops* (Japanese Base Operations)

6.2.2.19. JASDF Safety* (Japanese Safety Unit)

6.2.2.20. NAF Safety* (Naval Air Facility Safety)

6.2.2.21. Misawa City Airport Manager*

*Observer or honorary member of the BHWG

6.3. AUTHORITY. The BHWG acts as an advisory group for the Fighter Wing Deputy Commander. The installation commander retains the final authority and responsibility of the BASH program. The FW/CD is able to implement the recommendations from the BHWG through the chain of command. Host Nation (HN) instructions receive precedence over this publication, in the absence of HN guidance adhere to this instruction if it is consistent with host country laws and Status of Forces Agreements (SOFA). The chairman of the BHWG will approve or disapprove group recommendations and meeting minutes. Meeting minutes will be maintained by and distributed by 35 FW/SEF.

6.4. Semi-annual Meetings. The BHWG will meet two times a year prior to the start of each Phase II (March/September) migratory period, or as requested by 35 FW/SEF or the chairman of the group. All members of the BHWG are required to attend meetings, if unable to attend, a representative will be sent in their place.

6.5. MEETING AGENDA. The semi-annual BHWG meeting will cover at minimum but not limited to the following topics: Misawa AB bird strike statistics, USAF bird strike statistics, BASH team updates, locally observed bird activity, local wildlife habitat management/modification, local BASH instruction procedures, responsibilities, BASH awareness, education and training. BHWG meetings should concentrate on taking a proactive role in preventing future strikes, and not solely on reviewing historical data.

Chapter 7

BIRD WATCH CONDITIONS

7.1. Bird Hazard Waring System. These procedures establish methods to use for the immediate exchange of information between ground agencies and aircrews concerning the existence and location of birds that pose a hazard to the safety of flight. If a bird hazard exists, the 35 FW/SOF and/or AMOPS will be notified. Appropriate radio net or telephone can be used to make this notification (SOF: 226-3564, AMOPS: 226-3110).

7.2. Bird Watch Condition (BWC) Codes. The following terminology is established for rapid communication of bird activity. Bird locations should be given with the condition code.

7.2.1. Declaring a BWC. The authority to declare a BWC is vested in the 35 FW SOF during 35 FW flight operations. Conditions are declared based on ground observations, pilot reports and all other available information.

7.2.1.1. When on duty, the 35 FW SOF is the only person authorized to change the BWC.

7.2.1.2. When there is no 35 FW SOF on duty, 35 FW AMOPS representative on duty will determine the BWC.

7.2.2. BWC SEVERE SHALL be declared when any of the following occur: any large bird i.e. geese, osprey, swans, black kites or concentrations of birds (approx. 6-12 depending on size) above or in the vicinity of the runway (within 100 feet) or in the arrival/departure routes; flocking birds crossing within 1nm of runway ends; any reported bird strike in Class D airspace; large concentration of birds in the WEZ; or birds are at concentrations in the WEZ greater than BWC moderate. Note: BWC SEVERE need not be declared solely for the purpose of bird dispersal but should be declared if dispersal actions will impact flying operations. Only during times when actual hazards are noted as described above should conditions be elevated and flight restrictions employed. Seasonally determined BWC not only leads to lost training time but can lead to diversion of assigned and transient aircraft to other airfields such as Hachinohe where condition codes are absent, and dispersal activities may not be present, potentially leading to increased hazards at these locations.

7.2.2.1. Misawa Air Base Pattern. Takeoffs, patters, and landings are prohibited (unless approval is specifically granted by the 35 OG/CC or in an emergency). Close formation/chase is prohibited.

7.2.3. BWC MODERATE will be declared when any of the following occur: high daily bird survey numbers; flocking birds are observed in the Class D airspace; or moderately increased levels of birds are observed in the WEZ, not meeting BWC SEVERE criteria. BWC MODERATE requires increased vigilance by all agencies and supervisors and caution by aircrews.

7.2.3.1. Takeoffs. There will be no formation takeoffs during BWC MODERATE unless approved by the 35 OG/CC, aircraft will expedite climb above 500’ AGL. Pilot should consider using afterburner (if so equipped) for all takeoffs. Takeoff only when departure route avoids identified activity.

7.2.3.2. Pattern Operations. Formations will space themselves no closer than route position.

Aircraft limited to full stop landing or restricted low approaches at or above 500' AGL.

7.2.3.3 Landing. No formation landings. Aircraft limited to full stop landing or restricted low approaches at or above 500' AGL unless 35 OG/CC approves otherwise. Land only when arrival route avoids the identified bird activity.

7.2.4. BWC LOW. Bird activity on or around the airfield representing low potential for strikes. No restrictions.

7.3. Traffic Pattern Restrictions. After coordinating with the Tower supervisor, the SOF shall restrict aircraft according to the BWC.

7.3.1. NIGHT FLYING. 35 FW will minimize night flying missions, unless necessary, during the waterfowl migration months of April, May, October, and November (BASH Phase II). Migrating birds are most active from sunset through sunrise with numbers decreasing in the early morning hours.

7.4. Dispersal Operations. 35 FW/SEF is the OPR for the dispersal team. For wildlife dispersal operations, SEF and AMOPS can be called for assistance as well as Pest Management for trapping and relocation of mammals.

7.4.1. Prior to initiation of dispersal actions, the dispersal team will coordinate with the SOF the location and number of wildlife. If dispersal efforts will impact flying operations, BWC SEVERE should be considered prior to dispersal activities and monitored for changes. If there are no flying operations, personnel may request blanket approval for dispersal if expected to occur for a lengthy period.

7.4.2. Dispersal personnel will coordinate any use of firearms or pyrotechnics with Base Defense Operations Center (BDOC – 226-3480) prior to dispersals to mitigate any potential for false active shooter alerts. Coordination will include location, duration and type of dispersal.

7.4.3. Avian and mammals will be managed utilizing a variety of methods. The methods used will be at the discretion of the dispersal personnel based on the situation.

7.4.4. When targeted threat departs the area, the SOF and AMOPS will be notified so the BWC can be lowered as required.

7.4.5. Dispersal teams will operate in pairs when using the air rifles and the shotgun as well as wear appropriate PPE (i.e. reflective vest, eye and ear protection).

7.4.5.1. Usage: if near the base perimeter fencing, firing will only be in a direction resulting in ammunition impacting within the base perimeter. Dispersal team will contact Misawa Ground (ATC) to notify the use of "bird harassment in the area of XX for the next XX minutes". Ensure Ground notifies of any inbound or outbound air traffic during that time. Preferred method of fire for the shotgun/air rifle is when the bird is on the ground, however, if an "air" shot is required, the line of fire must be parallel to the runway/taxiway.

7.4.5.2. Clearing and safing weapons. Prior to entering the storage building ensure the shotgun and air rifle are clear and safe. Safe the weapons by placing the safety button so that no red is showing or that the safety lever is pulled aft towards the trigger. Pull the bolt to the rear and lock in the open position and verify there is no ammunition in the chamber.

7.4.5.3. Ammunition and gun log. Ensure when taking the shotgun out of the storage location the log located next to the continuity binder is filled out. If ammunition is expended (i.e. shotgun

shells, blanks, bangers, screamers) and expenditure sheet is filled out and sent to 35 FW/SEF within 24 hrs. Air rifle pellets do not have to be accounted for on an expenditure sheet. Shells and casings will be collected after being discharged and placed in the ammunition box located in the storage location.

7.4.5.4. Bird remains. Remains will be collected, counted, identified and logged on the depredation worksheet. Remains will then be disposed of IAW the base disposal agreement with Pest Management. Rubber gloves and mask should be worn when handling remains. Double bag carcasses and place in remains bin outside of building 936, place gloves and mask in the bag with the remains and then seal the bag. Immediately wash your hands prior to touching face.

7.4.6. Scare Wars System. The Scare Wars System (BASH Cannons) are a commercial propane bird deterrent product owned by 35 FW/SEF and operated by SOF and AMOPS via handheld controllers or the computer station in AMOPS. Each of the 20 units contain a propane-powered cannon and loudspeaker to emit bird distress calls. The cannons are wired on the 140-675 MHz frequency.

7.4.6.1. Activation procedures. Authorized users will request bird cannon activation from Misawa Ground, SOF and SEF before use. Activation will be done within 1 minute of the clearance. Ensure with Misawa Ground that there is no departure or arrival aircraft within 2 minutes of activation. Post activation usage will be logged in the AF IMT 3616.

7.4.6.2. The cannons and speakers emit sounds over 130 db, therefore personnel should wear ear protection at all times when working within 100 yards of a cannon. No smoking or open flame is allowed within 50 feet. No maintenance will be conducted on cannons unless properly trained. Contact service contractor at 226-4442/662-335-5822 if a cannon becomes unserviceable or damaged. Damaged or overturned cannons will be de-activated and inspected prior to returning to use.

Chapter 8

BIRD/WILDLIFE STRIKE REPORTING

8.1. Bird/wildlife Strike Reporting. This section outlines the procedures and forms required to report bird strikes to enhance the BASH program at Misawa Air Base.

8.2. SAFSOs. SAFSOs should assist aircrews involved in a bird strike by providing the AF Form 853, *Air Force Bird Strike Report*, and ensure it is available to 35 FW/SEF within 24 hrs. SAFSOs should also ensure that remains are collected and retained appropriately for SEF.

8.3. Damage totals. All bird strikes should be reported IAW DAFI 91-204 but strikes causing over $20,000 in damage will be reported. 35 FW/CP will provide incident notification IAW AFMAN 10-206, *Operational Reporting* as supplemented by PACAF.

8.4. Maintenance Personnel. Maintenance personnel discovering evidence of a bird strike will stop maintenance and notify Quality Assurance (QA) and MOC, who will notify SEF. Maintenance will recover and remains discovered on the aircraft (blood, feathers, etc.) IAW T.O. 1-1-691 and this instruction.

8.4.1. If remains are found, members will wear rubber gloves and mask when handling remains or snarge. To collect samples, place whole samples (feathers, carcasses) into a plastic bag and seal. For blood, a cotton swab or ball will be wetted with Isopropyl Alcohol and affected area wiped with swab and placed in separate bag from whole samples. If there are multiple impact points on the aircraft, a different swab will be used for each location and bagged and labeled separately with tail number and location where sample was taken from. All samples will be retained until retrieved by 35 FW/SEF. Samples should be double bagged and kept in the freezer to avoid decomposition.

8.5. AMOPS and Transient Alert personnel. AMOPS and Transient Alert (TA) personnel will assist transient aircrews in filling out AF Form 853 and forward the information to the 35 FW/SEF. If remains are discovered on the runway, AMOPS will remove the remains after noting their location, provide them to 35 FW/SEF.

8.6. Host Nation Coordination.

8.6.1. Japanese Air Self-Defense Force (JASDF). 35 FW will coordinate with JASDF per MOUI FB5235-92-3005. Applicable tenents of that agreement are as follows:

8.6.1.1. Information Exchange. Exchange bird strike information/remains with 35 FW/SEF. Bird reports should include: any aircraft damage, aircrew recognition (discovered during or post flight), date and time, weather conditions, species if known, bird location and altitude, bird activity (soaring, roosting etc.) any other pertinent information.

8.6.1.2. Bird Scare/Abatement. Conduct bird scare of abatement procedures as determined by the BHWG on airfield areas maintained by JASDF. This includes but is not limited to, grass mowing procedures, grass height limitations, landscaping and drainage control. Use bird harassment/scare procedures when requested by AMOPS.

8.6.1.3. JASDF BASH Training. JASDF Base Operations Commander is responsible for training JASDF team members in bird scare procedures and safety requirements. 35 FW/SEF is

available for assistance for training JASDF members.

8.6.1.4. USAF Bird Scare/Abatement. When requested authorize bird scare/abatement procedures, clear usage if not takeoffs or landings occurring in next 2 minutes.

8.6.1.5. BHWG. Attend BHWG meetings and provide inputs as necessary.

8.6.2. Japan Civil Aviation Bureau.

8.6.2.1. Airfield Management will lead the 35 FW efforts to coordinate with Misawa City Airport. 35 FW requests the following action from the Misawa City Airport:

8.6.2.2. Notify 35 FW/SEF (DSN: 226-2710) any time a civilian aircraft observes and reports hazardous bird activity or experiences an actual bird strike. Provide any remains/feathers to 35 FW/SEF as well as the following information: aircraft damage, aircrew recognition (discovered during flight or post flight), date/time, weather conditions, bird species if known, bird location and altitude, and any other pertinent information.

8.6.2.3. BHWG. Attend BHWG meetings and provide inputs as necessary.

8.7. 35 FW Flight Safety Office: The 35th Fighter Wing Safety Office will forward bird/wildlife remains IAW DAFMAN 91-223. After remains are identified, 35 FW/SEF will finalize the AFSAS report.

PAUL T. DAVIDSON, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCS AND SUPPORTING INFORMATION

References

35 FWI 13-204, *Airfield Operations, 02 May 2023*

AFI 13-213_35FWSUP, *Airfield Driving, 12 Jun 2023*

AFMAN 32-1053, I*ntegrated Pest Management, 6 Aug 2019*

AFI 33-322, *Records Management and Information Governance Program, 23 Mar 2020*

AFMAN 10-206, *Operational Reporting, 18 Jun 2018*

AFMAN 32-1053, *Integrated Pest Management, 06 Aug 2019*

DAFI 91-202, *The US Air Force Mishap Prevention Program, 10 May 2023*

DAFI 91-202_ *PACAFSUP, The US Air Force Mishap Prevention Program 26 Apr 2023*

DAFI 91-204, *Safety Investigations and Reports, 10 Mar 2021*

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DAFMAN 32-7003, *Environmental Conservation, 26 Jun 2024*

DAFMAN 91-223, *Aviation Safety Investigations and Reports, 18 Dec 2019*

DODI 4715.03, *Natural Resources Management, 22 Jul 2024*

Misawa Air Base Integrated Natural Resources Management Plan (INRMP), 30 Nov 2024

MOUI FB5235-92-3005, *Memorandum of Understanding International, 12 May 2023*

Technical Order 1-1-691, *Cleaning and Corrosion Control and Prevention Aerospace and Non-Aerospace Equipment, 13 Dec 2024*

Unified Facilities Code 3-260-1, *Airfield and Heliport Planning and Design, 05 May 2020*

Adopted Forms

DAF Form 847, Recommendation for Change of Publication

AF Form 853, Air Force Wildlife Strike Report

Abbreviations and Acronyms

AGL – Above Ground Level

AMOPS – Airfield Management Operations

ANSI – American National Standards Institute

ATC—Air Traffic Control

ATIS—Automated Terminal Information System

AvSNCO—Aviation Safety Non-Commissioned Officer

BASH—Bird/Wildlife Aircraft Strike Hazard

BAT—Bird Abatement Team

BDOC – Base Defense Operations Control

BHWG—Bird Hazard Working Group

BWC—Bird Watch Condition

CATM – Combat Arms Training and Maintenance

CMA – Controlled Movement Area

ECP – Entry Control Point

LSO-Laser Safety Officer

MOC – Maintenance Operations Control

NAF—Naval Air Facility

OSHA – Occupational Safety and Health Administration

PIREP—Pilot Report

PPE – Personal Protective Equipment

QA – Quality Assurance

SAFSO – Squadron Assigned Flight Safety Officer

SEF—Flight Safety

SOF—Supervisor of Flying

TDY – Temporary Duty

VFR—Visual Flight Rules

WEZ – Wildlife Exclusion Zone

Attachment 2

MISAWA BIRD HAZARD GUIDE

A2.1. Local Bird Species List: MAB Bird species identified by OYO Pacific Corporation conducted from 24 Oct 2022 – 11 Aug 2023. Below are the species identified in the survey. These surveys identify the threatened, endangered, and protected species on MAB.

Figure A2.1. Local Bird Species List. (1 of 6).

No.	Family	Species Name	Japanese Name (English Name)	Rarity Status				MAB	DR	Source
				JEGS	JRDB	ARDB	IUCN			
1	Phasianidae	*Symaticus soemmerringii*	Yamadori (Copper Pheasant)			C	NT		●	D
2	Anatidae	*Anser fabalis*	Hishikui (Bean Goose)	●	VU	C	LC	●	●	A, C, G, J
3		*Anser albifrons*	Magan (Greater White-fronted Goose)	●	NT	C	LC	●	●	A, C, F, G, I, J
4		*Branta bernicla*	Kokugan (Brant Goose)	●	VU	C	LC		●	A
4		*Branta hutchinsii*	Shijukaragan (Cackling Goose)	●	CR		LC	●	●	I, J
5		*Aix galericulata*	Oshidori (Mandarin Duck)		DD		LC	●		A
6		*Anas strepera*	Okayoshigamo (Gadwall)			C	LC	●		A
7		*Anas falcata*	Yoshigamo (Falcated Duck)			C	NT	●	●	A, B, C, D, H, I
8		*Anas clypeata*	Hashibirogamo (Northern Shoveler)			C	LC	●	●	A, C, D, F, G
9		*Melanitta fusca*	Birodokinkuro (Velvet Scoter)			C	VU		●	A
10	Podicipedidae	*Podiceps cristatus*	Kanmurikaitsuburi (Great Crested Grebe)		LP	C	LC	●	●	A, B, D, E, F, G, H, I, J
11	Columbidae	*Treron sieboldii*	Aobato (Japanese Green Pigeon)			C	LC	●	●	A, B, C, D, E

Figure A2.2. Local Bird Species List con't (2 of 6).

No.	Family	Species Name	Japanese Name (English Name)	Rarity Status				MAB	DR	Source
				JEGS	JRDB	ARDB	IUCN			
13	Ardeidae	*Botaurus stellaris*	Sankanogoi (Eurasian Bittern)		EN	A	LC		●	D, I
14		*Ixobrychus sinensis*	Yoshigoi (Yellow Bittern)		NT	B	LC	●		A
15		*Ixobrychus eurhythmus*	Oyoshigoi (Von Schrenck's Bittern)		CR	A	LC		●	D
16		*Egretta intermedia*	Chusagi (Intermediate Egret)		NT		LC		●	A, E
17	Rallidae	*Rallus aquaticus*	Kuina (Water Rail)			B	LC	●	●	A, D, F
18		*Gallinula chloropus*	Ban (Common Moorhen)			C	LC	●		A, B, I
19	Caprimulgidae	*Caprimulgus indicus*	Yotaka (Jungle Nightjar)		NT	B	LC	●	●	B, D
20	Charadriidae	*Charadrius placidus*	Ikaruchidori (Long-billed Plover)			B	LC		●	I
21		*Charadrius alexandrinus*	Shirochidori (Kentish Plover)		VU		LC		●	B, D, E, G, H, I, J
22	Scolopacidae	*Scolopax rusticola*	Yamashigi (Eurasian Woodcock)			B	LC	●		A, I
23		*Gallinago hardwicki*	Ojishigi (Latham's Snipe)		NT	B	NT	●	●	A, B, C, D E, F, H, I
24		*Limosa lapponica*	Osorihashishigi (Bar-tailed Godwit)		VU		NT		●	I

Figure A2.3. Local Bird Species List con't. (3 of 6)

No.	Family	Species Name	Japanese Name (English Name)	Rarity Status				MAB	DR	Source
				JEGS	JRDB	ARDB	IUCN			
25	Scolopacidae	*Limosa limosa*	Oguroshigi (Black-tailed Godwit)			C	NT		●	A
26		*Numenius arquata*	Daishakushigi (Eurasian Curlew)			B	NT		●	E
27		*Tringa totanus*	Akaashishigi (Common Redshank)		VU	B	LC		●	A
28		*Xenus cinereus*	Sorihashishigi (Terek Sandpiper)			C	LC		●	A, J
29		*Calidris ferruginea*	Saruhamashigi** (Curlew Sandpiper**)			B	NT		●	E
30		*Calidris alpina*	Hamashigi (Dunlin)		NT		LC		●	E, H
31	Laridae	*Larus schistisagus*	Osegurokamome (Slaty-backed Gull)		NT		LC		●	G, H, I, J
32		*Sterna albifrons*	Koajisashi (Little Tern)	●	VU	A	LC		●	A
33	Alcidae	*Synthliboramphus antiquus*	Umisuzume (Ancient Murrelet)		CR		LC		●	A
34	Pandionidae	*Pandion haliaetus*	Misago (Osprey)		NT	B	LC	●	●	A, B, C, D, E, F, G, H, I, J
35	Accipitridae	*Pernis ptilorhynchus*	Hachikuma (Crested Honey Buzzard)		NT	C	LC		●	H
36		*Haliaeetus albicilla*	Ojirowashi (White-tailed Eagle)	●	VU	A	LC	●	●	B, C, F, H, I, J

Figure A2.4. Local Bird Species List con't (4 of 6).

No.	Family	Species Name	Japanese Name (English Name)	Rarity Status				MAB	DR	Source
				JEGS	JRDB	ARDB	IUCN			
37	Accipitridae	*Haliaeetus pelagicus*	Owashi (Steller's Sea Eagle)	●	VU	B	VU	●	●	H, I
38		*Circus spilonotus*	Chuhi (Eastern Marsh Harrier)	●	EN	B	LC	●	●	A, B, C, D E, F, G, I
39		*Circus cyaneus*	Haiirochuhi (Hen Harrier)			B	LC		●	A
40		*Accipiter gularis*	Tsumi (Japanese Sparrowhawk)			B	LC	●	●	A, C, D
41		*Accipiter nisus*	Haitaka (Eurasian Sparrowhawk)		NT	B	LC	●	●	A, B, C, D E, F, G, H, I, J
42		*Accipiter gentilis*	Otaka (Northern Goshawk)		NT	B	LC	●	●	A, C, D, E, F, H
43		*Butastur indicus*	Sashiba (Grey-faced Buzzard-eagle)		VU	B	LC		●	A
44		*Buteo lagopus*	Keashinosuri (Rough-legged Buzzard)			B	LC	●		H
45	Strigidae	*Strix uralensis*	Fukuro (Ural Owl)			C	LC	●		A, D, F
46	Alcedinidae	*Halcyon coromanda*	Akashobin (Ruddy Kingfisher)			B	LC	●		C, E
47		*Megaceryle lugubris*	Yamasemi (Crested Kingfisher)			C	LC		●	E
48	Picidae	*Jynx torquilla*	Arisui (Eurasian Wryneck)			C	LC	●		A

Figure A2.5. Local Bird Species List con't (5 of 6).

No.	Family	Species Name	Japanese Name (English Name)	Rarity Status				MAB	DR	Source
				JEGS	JRDB	ARDB	IUCN			
49	Picidae	*Dendrocopos leucotos*	Oakagera (White-backed Woodpecker)			C	LC	●		A
50	Falconidae	*Falco tinnunculus*	Chogembo (Common Kestrel)			C	LC	●	●	A, C, D, F, G, H, I
51		*Falco columbarius*	Kochogembo (Merlin)			C	LC		●	H
52		*Falco subbuteo*	Chigohayabusa (Eurasian Hobby)			C	LC	●	●	C, E, F
53		*Falco peregrinus*	Hayabusa (Peregrine Falcon)	●	VU	B	LC	●	●	A, B, C, D, F, G, H, I
54	Campephagidae	*Pericrocotus divaricatus*	Sanshokui (Ashy Minivet)		VU	B	LC	●	●	A, C, D, E, F, G, H, I
55	Monarchidae	*Terpsiphone atrocaudata*	Sankocho (Japanese Paradise Flycatcher)			B	NT	●	●	A, B, E
56	Laniidae	*Lanius tigrinus*	Chigomozu (Tiger Shrike)		CR	A	LC	●		E
57	Phylloscopidae	*Phylloscopus examinandus*	Omushikui (Kamchatka Leaf Warbler)		DD		LC	●	●	E, F
58	Locustellidae	*Locustella pryeri*	Osekka (Japanese Marsh Warbler)	●	EN	A	NT		●	A, B, C, D, E, F, G, H, I, J
59	Cisticolidae	*Cisticola juncidis*	Sekka (Zitting Cisticola)			D	LC		●	D, G
60	Certhiidae	*Certhia familiaris*	Kibashiri (Eurasian Treecreeper)			C	LC	●	●	F, G, I, J

Figure A2.6. Local Bird Species List con't (6 of 6).

No.	Family	Species Name	Japanese Name (English Name)	Rarity Status				MAB	DR	Source
				JEGS	JRDB	ARDB	IUCN			
61	Muscicapidae	*Zoothera sibirica*	Mamijiro (Siberian Thrush)			C	LC	●	●	A, C, D, H
62	Muscicapidae	*Turdus cardis*	Kurotsugumi (Japanese Thrush)			C	LC	●	●	A, D, E, F, G, H, I, J
63	Prunellidae	*Prunella rubida*	Kayakuguri (Japanese Accentor)			C	LC	●		F, I
64	Motacillidae	*Motacilla grandis*	Segurosekirei (Japanese Wagtail)			C	LC	●		A, C, E, F, H, I
65	Fringillidae	*Loxia curvirostra*	Isuka (Common Crossbill)			D	LC	●	●	A, C, E, F, G, H
66	Emberizidae	*Emberiza sulphurata*	Nojiko (Yellow Bunting)		NT	C	VU	●	●	A, C, D, E, F, H
67		*Emberiza variabilis*	Kuroji (Grey Bunting)			C	LC	●		C, H
68		*Emberiza yessoensis*	Kojurin (Japanese Reed Bunting)		VU	B	NT	●	●	A, B, C, D, E, F, H, I
69		*Emberiza schoeniclus*	Ojurin (Common Reed Bunting)			B	LC	●	●	A, C, D, I, J
Total	29 Families	69 Species (Cumulative)		10	34	65	69	44	54	

Attachment 3

PROTECTED BIRDS

Figure A3.1. Local Birds (Critically Endangered).

Cackling Goose

Tiger Shrike

Ancient Murrelet

Von Schrenck's Bittern

Figure A3.2. Local Birds (Endangered).

Japanese Marsh Warbler

Eastern Marsh Harrier

Eurasian Bittern

Figure A3.3. Local Birds (Vulnerable). (1 of 4).

Bean Goose

Kentish Plover

White-tailed Sea-eagle

Figure A3.4. Local Birds (Vulnerable) con't. (2 of 4).

Rustic Bunting

Peregrine Flacon

Ashy Minivet

Figure A3.5. Local Birds (Vulnerable) con't. (3 of 4).

Grey-faced Buzzard-eagle

Steller's Sea Eagle

Little Tern

Common Redshank

Figure A3.6. Local Birds (Vulnerable) con't. (4 of 4).

Brant Goose

Bar-tailed Godwit

Figure A3.7. Local Birds (Near Threatened). (1 of 4).

Eurasian Sparrowhawk

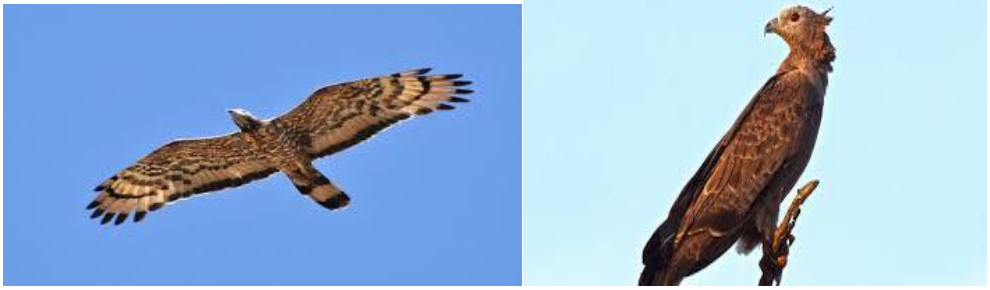
Osprey

Slaty-backed Gull

Figure A3.8. Local Birds (Near Threatened) con't. (2 of 4).

Greater White-fronted Goose

Crested Honey Buzzard



Black scoter

Grey-tailed tattler

Figure A3.9. Local Birds (Near Threatened) con't. (3 of 4).

Northern Goshawk

Japanese Paradise Flycatcher

Yellow Bunting

Dunlin

Figure A3.10. Local Birds (Near Threatened) con't. (4 of 4).

Latham's Snipe

Jungle Nightjar

Intermediate Egret

Yellow Bittern

Attachment 4

SANCTUARIES AND HABITATS

A4.1. Bird Sanctuaries in Japan: The following maps provide locations of significant bird sanctuaries in Japan and the number of active species based on season. Aircrews should use caution when operating in these areas. All information is derived from the 2010 Sanctuary Survey. More detailed information on species and activity can be obtained by request through SEF or by reviewing the files on the SEF SharePoint. PFPS drawing and route files are also available through SEF.

Figure A4.1. Bird Sanctuaries in Japan.

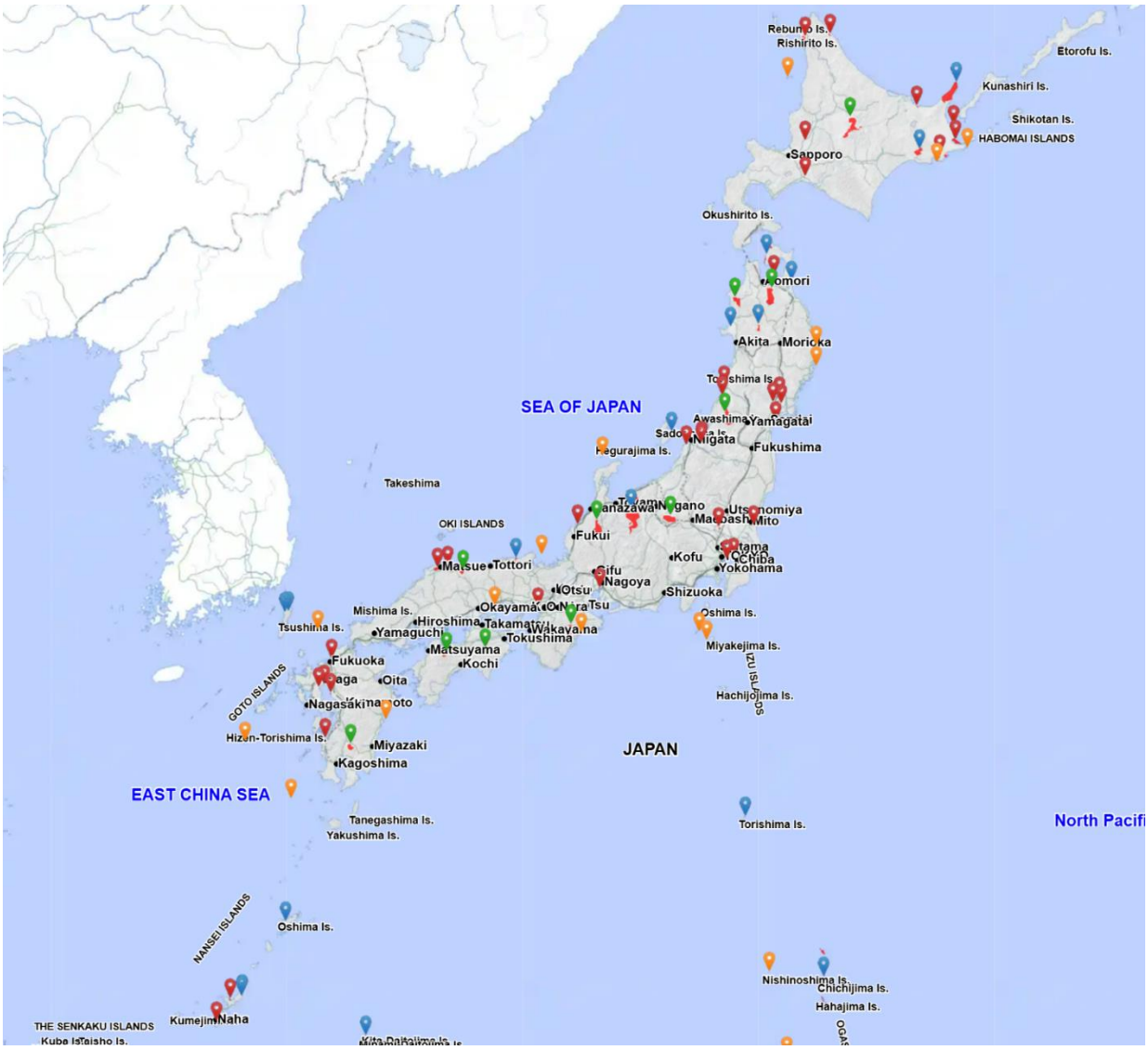


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Figure A4.2. Hokkaido Bird Habitat Areas.

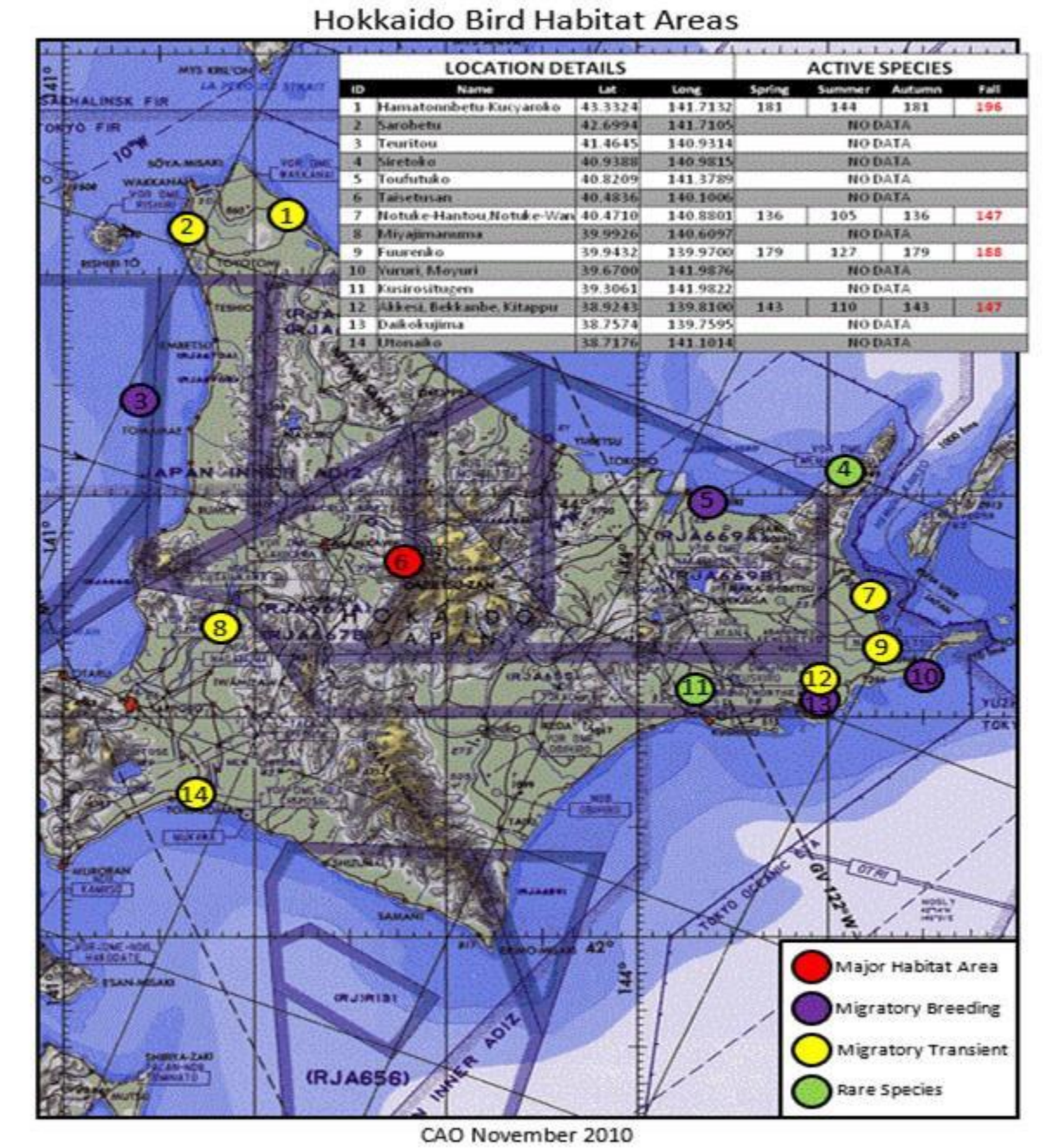


Figure A4.3. Northern Honshu/Southern Hokkaido Bird Habitat Areas.

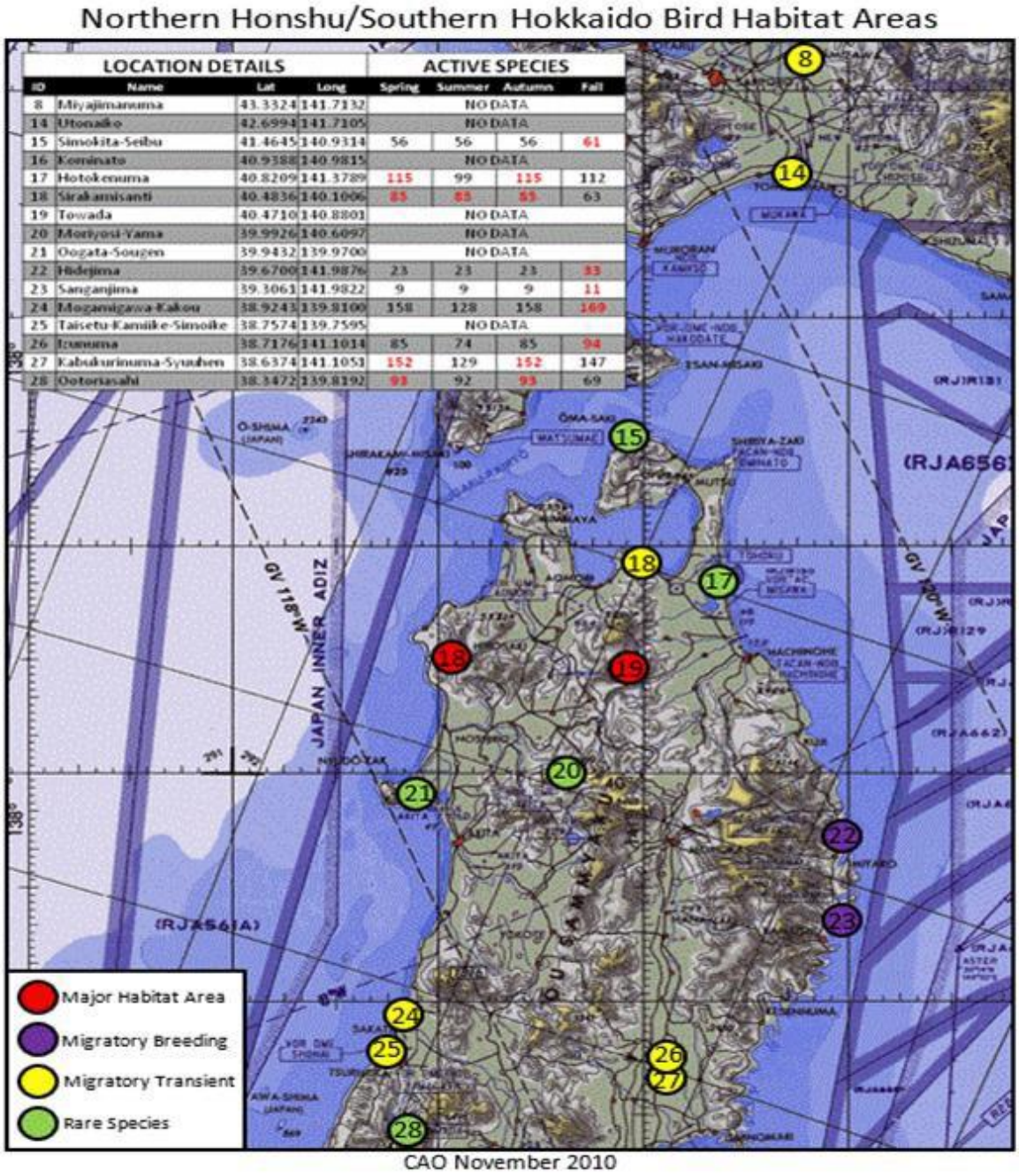
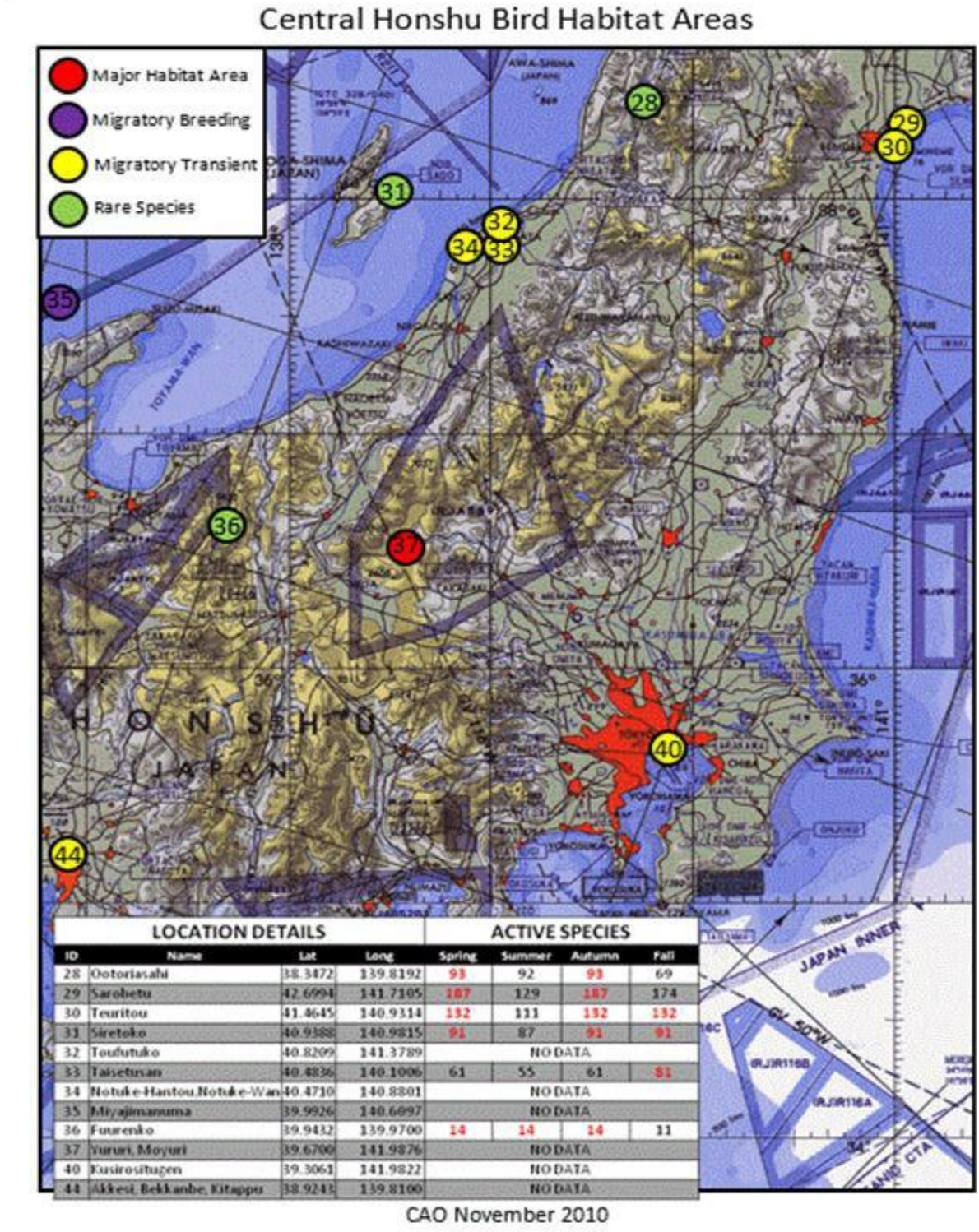


Figure A4.4. Central Honshu Bird Habitat Areas.



LOCATION DETAILS				ACTIVE SPECIES			
ID	Name	Lat	Long	Spring	Summer	Autumn	Fall
28	Ootoriasahi	38.3472	139.8192	93	92	93	69
29	Sarobetu	42.6994	141.7105	187	129	187	174
30	Teuritou	41.4645	140.9314	132	111	132	132
31	Siretoko	40.9388	140.9815	91	87	91	91
32	Toufutuko	40.8209	141.3789	NO DATA			
33	Taisetsuzan	40.4836	140.1006	61	55	61	81
34	Notuke-Hantou,Notuke-Wan	40.4710	140.8801	NO DATA			
35	Miyajimanuma	39.9926	140.6897	NO DATA			
36	Fuurenko	39.9432	139.9700	14	14	14	11
37	Yururi, Moyuri	39.6700	141.9876	NO DATA			
40	Kusirositugen	39.3061	141.9822	NO DATA			
44	Akkesi, Bekkanbe, Kitappu	38.9243	139.8100	NO DATA			

Figure A4.5. Shikoku/Eastern Honshu Bird Habitat Areas.

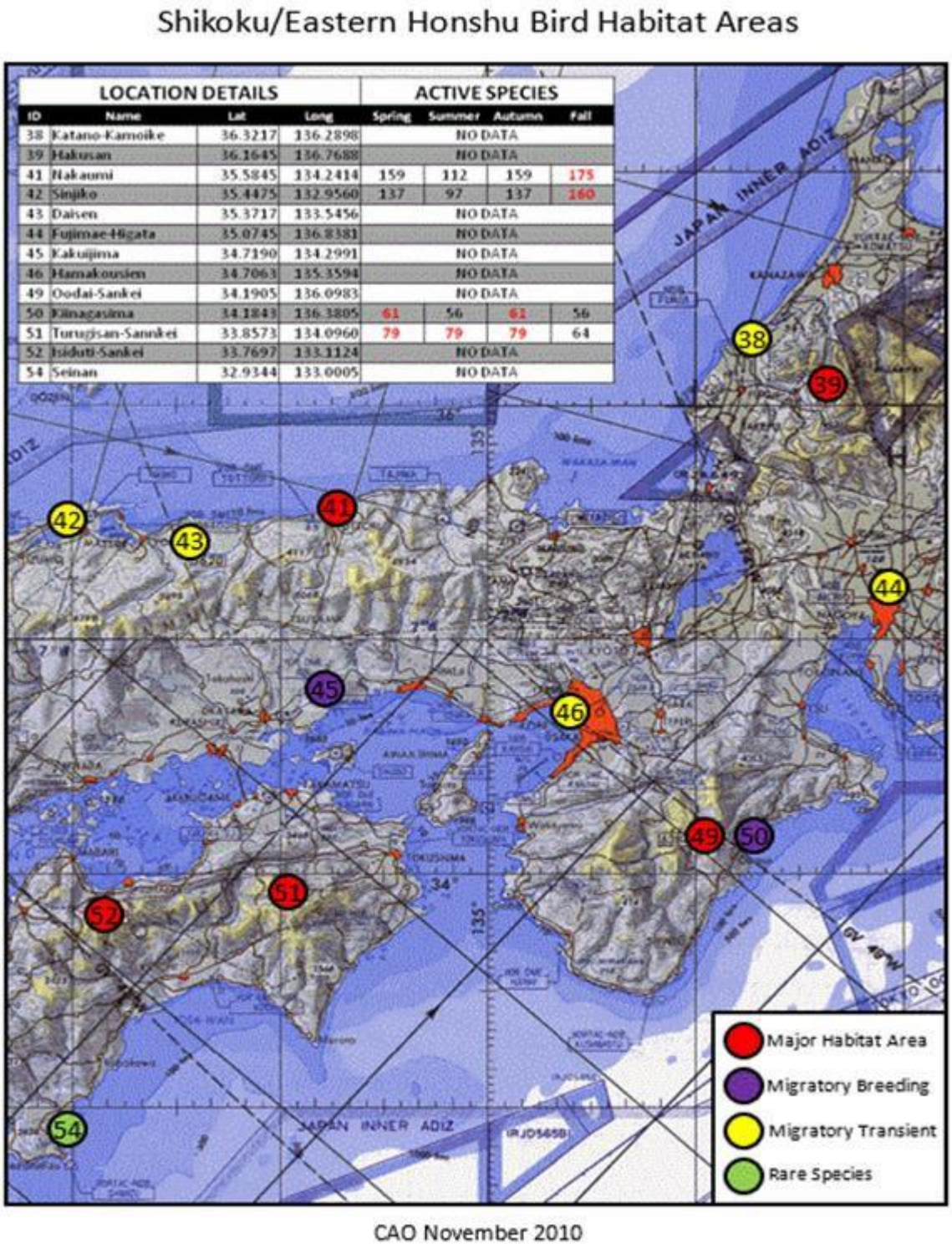


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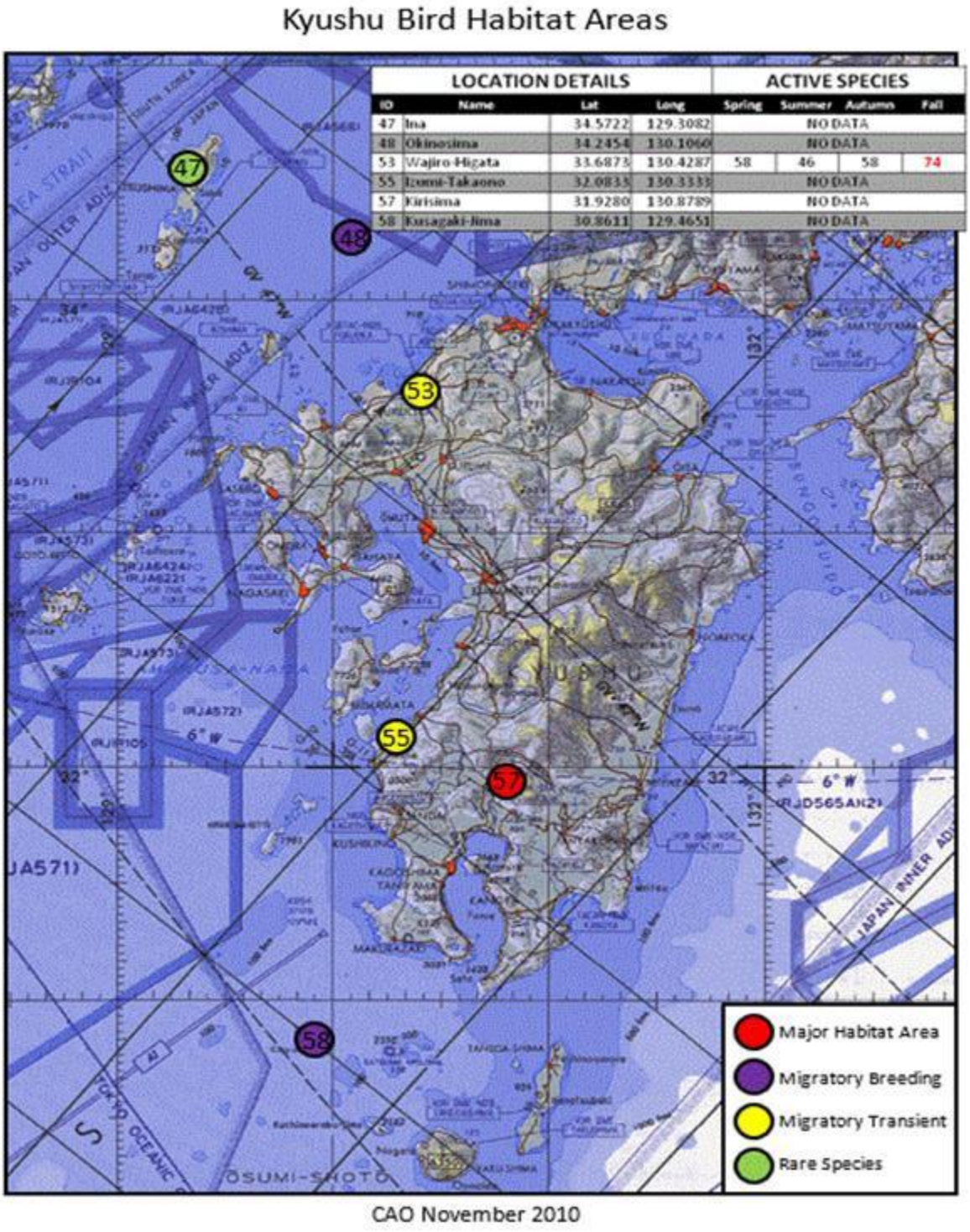
Figure A4.6. Kyushu Bird Habitat Areas.

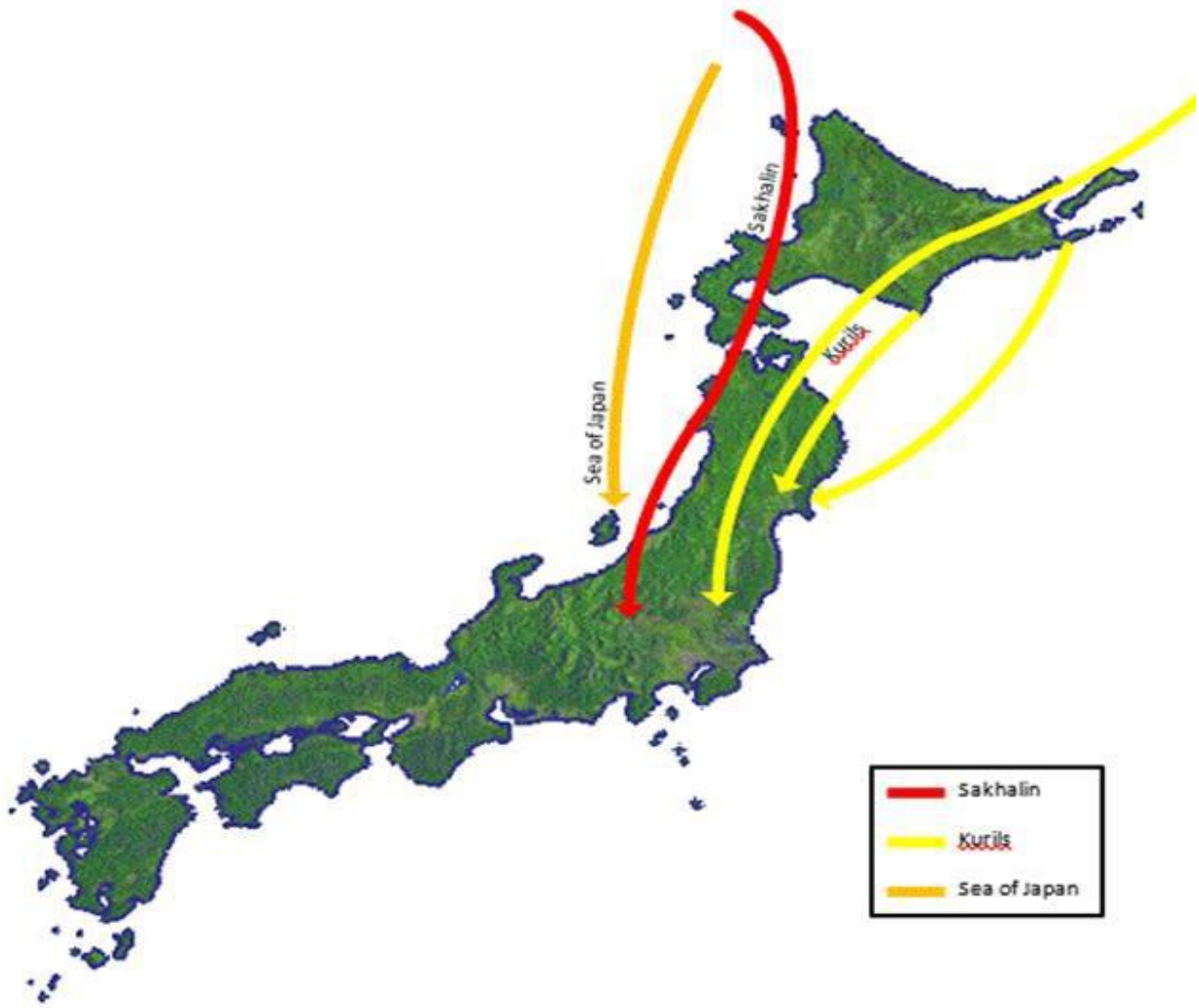


Attachment 5

MIGRATION ROUTES

Figure A5.1. Bird Migration Routes in Japan.

BIRD MIGRATION ROUTES IN JAPAN: This map depicts the migratory bird routes in Japan. Peak migration periods are late April through May and October through November. This information is also maintained on the 35 FW/SEF electronic files.



Attachment 6

BASH PROCEDURES

Figure A6.1. BASH Procedures.

BWC AUTHORITY: The 35 OG/CC has the BWC declaration authority.

35 OG/CC delegates this BWC authority to the 35 FW SOF, Airfield Management, or other organizations as needed.

NOTIFICATIONS FOR BWC CHANGES (INCLUDING DOWNGRADING BWC):

Agency: Will Notify:

35 FW SOF:
Tower (Update ATIS)
13th and 14th Squadron Ops Desks
Airfield Management
NAF Misawa
Wing Flight Safety

Airfield Management:
13th and 14th Squadron Ops Desks
JASDF Base Operations
Airfield Manager
NAF Misawa
Wing Flight
Safety
Post BWC for transient aircrews

IF NO SOF IN TOWER-

Tower – Update ATIS DRAUGHON

RANGE:
35 FW SOF

Airfield Management

Figure A6.2. BWC Guidelines.

BWC GUIDELINES: Severe, Moderate, and Normal labels will be used. These guidelines are flexible. The BWC authority should use his/her best judgment in declaring the BWC.	
SEVERE:	DOD FIH B-4. Bird activity on or immediately above the active runway or other specific location representing high potential for strikes. Supervisors and aircrews must thoroughly evaluate mission need before conducting operations in areas under condition SEVERE.
SEVERE CRITERIA:	More than 15 large birds and/or more than 30 small birds on or above the runway or target area at Draughon Range.
Flock activity on approach or departure corridors or in Draughon pop pattern.	
Large flock activity at key VFR pattern points, radar indications of large flock activity, pilot reports of heavy bird activity.	
Consider BWC SEVERE immediately after a report of a major bird strike (A/C emergency due to the strike or significant damage) until the situation can be assessed	
MODERATE:	DOD FIH B-4. Bird activity in locations representing increased potential for strikes. BWC moderate requires increased vigilance by all agencies and supervisors and caution by aircrews.
MODERATE CRITERIA:	Increased bird or wildlife activity meaning aircraft can operate with certain restrictions. Pilot or tower reports of several birds on approach or departure or in Draughon pop pattern.
Five or more large birds circling near the runway or near the target area at Draughon Range.	
Flock activity within 10 NM.	
Consider MODERATE for dawn and dusk (especially after rain) during April-May and October-November.	
LOW:	DOD FIH B-4. Bird activity on and around the airfield representing low potential for strikes.
LOW CRITERIA:	Normal level of risk due to bird or animal activity meaning aircraft can operate without BASH related restrictions.
Only occasional and isolated bird activity and no pilot reports of significant bird activity.	

Figure A6.3. Misawa Airfield Restriction Bird Watch Condition.

Airfield/Range Bird Watch Condition

Phase	BWC Low	BWC Moderate	BWC Severe
Takeoff	Normal Ops	No Formation takeoffs All takeoffs in AB Expedite climb >500' Takeoff only when departure avoids activity	Prohibited without 35 OG/CC or higher approval
Patterns		Formations no closer than route position. Limit to full stop landing Or restricted low approaches At or above 500' AGL	Prohibited without 35 OG/CC or higher approval (unless emergency) Aircraft will hold until bird activity subsides or land at divert base
Landing		No formation landings. Land only when arrival route Avoids ID'd bird activity.	Prohibited without 35 OG/CC or higher approval (unless emergency) Non-35 FW aircraft should consider holding until bird activity subsides or land at divert base
Draughon		Recover from all events above >500' AGL	Low Events Prohibited No Pop Pattern All attacks will recover >2300' AGL

LOCAL FLYING AREA RESTRICTIONS

A. No low-levels +/- 1 hr of sunrise/sunset during Apr, May, Oct, and Nov.

B. Avoid areas with known raptors based on PIREPs. Greatest Raptor activity exists:
* Summer: 1000-1700 hrs
* Max altitude: 3000' to 4000' AGL
* Ridge lines, rolling hills, coast

C. Remain >1000' AGL in areas of increased bird activity. Report to SOF or Base Ops as soon as practical.

D. Minimize night flying during April, May, Oct and Nov due to migrating birds.

Note: *Consider using same BWC for both DRAUGHON Range as well at Misawa airfield due to their relative proximity of each other.*
Pilot assessments of Misawa airspace can be used by controllers to change Draughon BWC

Figure A6.4. BASH Cannon Procedures.

BASH CANNON PROCEDURES
BASH cannons will be operated by Airfield Management, 35 FW SOF or 35 FW/SEF in accordance with the following directions.
1. Request "Cannon Activation" from Misawa Ground Control before use.
2. Activate ***within one minute*** or do not activate without a new clearance.
3. Ground will clear cannon activation when the following is true:
- No A/C cleared for takeoff or expected in the next 2 minutes.
- No landing A/C within the next 2 minutes.
4. Request 35 FW SOF help to coordinate timing during busy air traffic periods.
5. Airfield Management will ensure cannon activation is documented on the Bird / Wildlife Deterrent Summary log.
BASH CANNON RECOMMENDATIONS:
Use the BASH Cannons at random times especially near sunrise and sunset, even if flying activity is not immediately planned. Fire several or all cannons at once and observe bird response. If birds immediately land back in the same area, repeat the firing sequence and initiate other scare/depredation tactics.

BIRD DISPERSAL PROCEDURES **Non-Lethal:**	Use during normal and increased bird or wildlife activity. This is the first course of action to remove wildlife.
TOOLS:	OPS vehicle horn, lights, siren, distress tape and Effigies
Pyrotechnics; screamers, banger and cracker shells.	
BASH Cannon activation	
Radar indications of large flock activity	
Lethal:	Use during ***severe*** bird/wildlife activity or as required if initial methods are inadequate or non-effective.
TOOLS:	Shotguns, Pellet Guns
BAT team will respond within 45 minutes.	

GROUND PERSONNEL REPORTS OF BIRD ACTIVITY
All personnel, especially airfield management and maintenance personnel must report significant bird or wildlife activity to 35 FW/SEF.
DISCOVERED BIRD or ANIMAL REMAINS
1. If bird or animal remains are found and appear to have been struck by an aircraft: Call Base Ops 226-3110 or Flight Safety 226-2710
1. If airfield management or Flight Safety cannot immediately retrieve the remains:
- Note the location of where remains were found
- Place the remains in a plastic bag (use gloves if available)
- Ice or Freeze (if needed)
- Coordinate with Flight Safety time for pick-up/drop-off

Attachment 7

REPORTS AND FORMS

A7.1. General: This attachment provides forms required to report bird strikes/sightings per DAFI 91-202, DAFI 91-212, and 35 FW guidance.

A7.2. Forms included:

Figure A7.1. Reports and Forms.

Title	Description
Bird/Wildlife Sighting and Deterrence Report (attach 1)	Local form used by flight line personnel to report wildlife activity.
AF FORM 853 (attach 2)	Air Force Wildlife Strike Report Form. This report is to be filled out by aircrew members for all actual/suspected bird strikes, and is requested for any near-miss situations, or heavy bird concentrations.

A7.3. Submit forms to AMOPS (35oss.osam@us.af.mil) and SEF (35fw.sef@us.af.mil) upon completion.

A7.4. Flight line personnel are responsible to help reduce the hazards posed by birds/wildlife in our local flying area. When completing these forms, fill all blocks to the best of your knowledge; contact 35 FW/SEF (226-2710) with any questions or comments regarding these reports and forms. Give approximations if exact data is unknown and indicate that it is an approximation.

Figure A7.2. Bird/Wildlife Sighting and Deterrence Report.

BIRD/WILDLIFE SIGHTING AND DETERRENCE REPORT

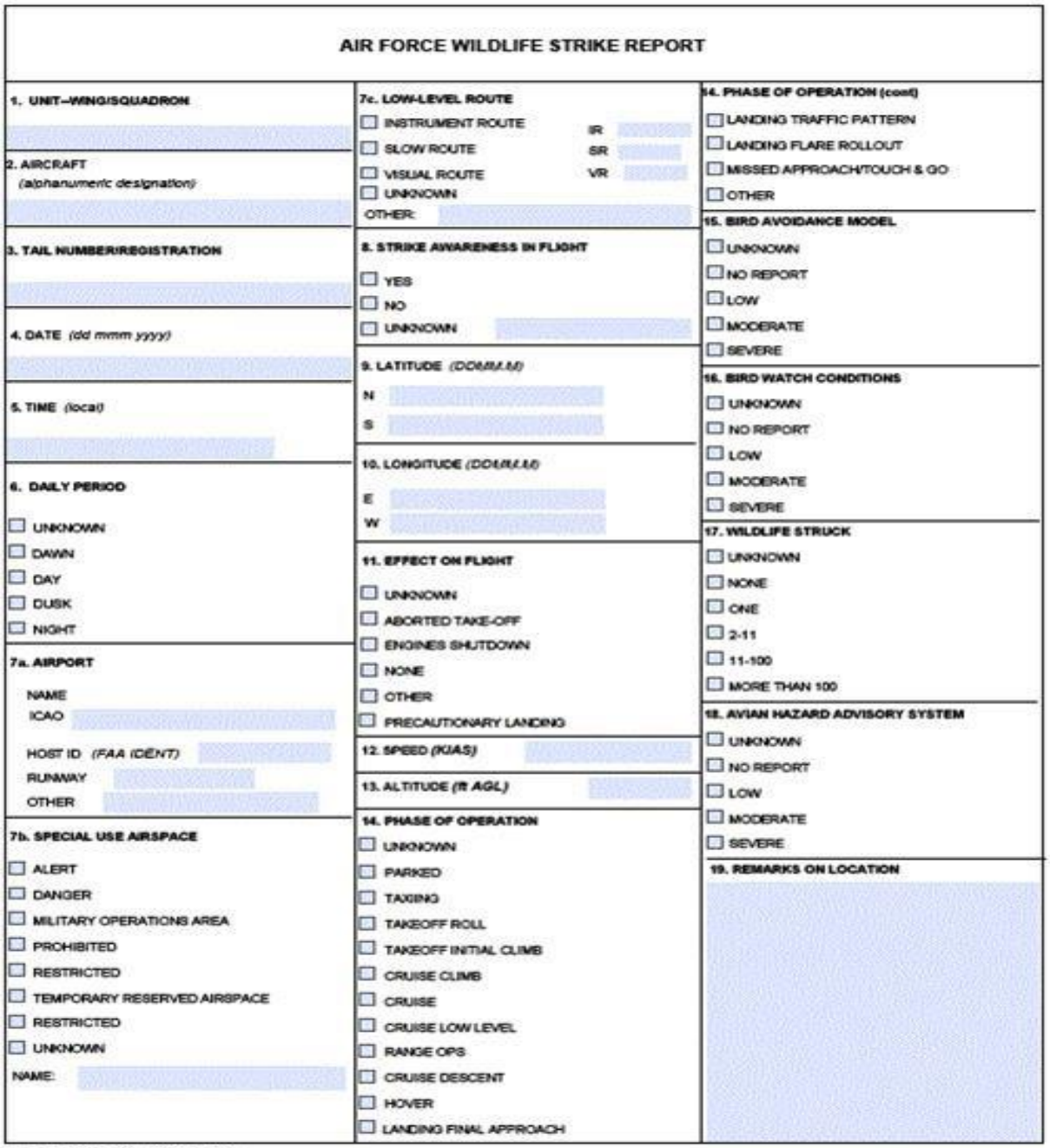
Use this form to document bird and wildlife sightings and deterrent on the airfield. This information is vital to preventing mishaps and damage to aircraft. PILOTS, DO NOT USE THIS FORM FOR ACTUAL BIRD STRIKES. Instead, use AF Form 853 posted in the Flying Squadrons and Airfield management

Promptly report birds or wildlife that are an ***immediate danger to aircraft*** to Airfield Management via telephone (226-3110) or via radio.

1. DATE/TIME: _____
2. WEATHER: (CLEAR, FOG, OVERCAST, RAIN, ETC.) _____
3. TYPE: BIRD OR ANIMAL (CIRCLE ONE)
4. LOCATION ON AIRFIELD: _____
5. SPECIES: (KITE, SPARROW, CROW, FOX, DOG, ETC.) _____
6. APPROXIMATE NUMBER SIGHTED: # _____
7. BIRD/ANIMAL ACTIVITY: (SOARING, FEEDING, LOAFING, ETC.) _____
8. (BIRDS): ALTITUDE/HEIGHT: _____
9. POSSIBLE ATTRACTANTS: (RODENTS, BUGS, WATER): _____
10. DETERRENT ACTION TAKEN/BASH TEAM RESPONSE: _____
11. YOUR NAME, OFFICE, DUTY PHONE #: _____

REMARKS: Give as many other details as possible to help define the birds or animals activities. Were they following mowers, crossing the airfield, just flying by, etc?

Figure A7.3. AF Form 853 Air Force Wildlife Strike Report (Front).



AIR FORCE WILDLIFE STRIKE REPORT

1. UNIT–WING/SQUADRON

2. AIRCRAFT
(alphanumeric designation)

3. TAIL NUMBER/REGISTRATION

4. DATE (dd mmm yyyy)

5. TIME (local)

6. DAILY PERIOD
- ☐ UNKNOWN
- ☐ DAWN
- ☐ DAY
- ☐ DUSK
- ☐ NIGHT

7a. AIRPORT
NAME
ICAO
HOST ID (FAA IDENT)
RUNWAY
OTHER

7b. SPECIAL USE AIRSPACE
- ☐ ALERT
- ☐ DANGER
- ☐ MILITARY OPERATIONS AREA
- ☐ PROHIBITED
- ☐ RESTRICTED
- ☐ TEMPORARY RESERVED AIRSPACE
- ☐ RESTRICTED
- ☐ UNKNOWN

NAME:

7c. LOW-LEVEL ROUTE
- ☐ INSTRUMENT ROUTE IR
- ☐ SLOW ROUTE SR
- ☐ VISUAL ROUTE VR
- ☐ UNKNOWN
- OTHER:

8. STRIKE AWARENESS IN FLIGHT
- ☐ YES
- ☐ NO
- ☐ UNKNOWN

9. LATITUDE (DDMMM)
N
S

10. LONGITUDE (DDMMM)
E
W

11. EFFECT ON FLIGHT
- ☐ UNKNOWN
- ☐ ABORTED TAKE-OFF
- ☐ ENGINES SHUTDOWN
- ☐ NONE
- ☐ OTHER
- ☐ PRECAUTIONARY LANDING

12. SPEED (KIAS)

13. ALTITUDE (ft AGL)

14. PHASE OF OPERATION
- ☐ UNKNOWN
- ☐ PARKED
- ☐ TAXIING
- ☐ TAKEOFF ROLL
- ☐ TAKEOFF INITIAL CLIMB
- ☐ CRUISE CLIMB
- ☐ CRUISE
- ☐ CRUISE LOW LEVEL
- ☐ RANGE OPS
- ☐ CRUISE DESCENT
- ☐ HOVER
- ☐ LANDING FINAL APPROACH

14. PHASE OF OPERATION (cont)
- ☐ LANDING TRAFFIC PATTERN
- ☐ LANDING FLARE ROLLOUT
- ☐ MISSED APPROACH/TOUCH & GO
- ☐ OTHER

15. BIRD AVOIDANCE MODEL
- ☐ UNKNOWN
- ☐ NO REPORT
- ☐ LOW
- ☐ MODERATE
- ☐ SEVERE

16. BIRD WATCH CONDITIONS
- ☐ UNKNOWN
- ☐ NO REPORT
- ☐ LOW
- ☐ MODERATE
- ☐ SEVERE

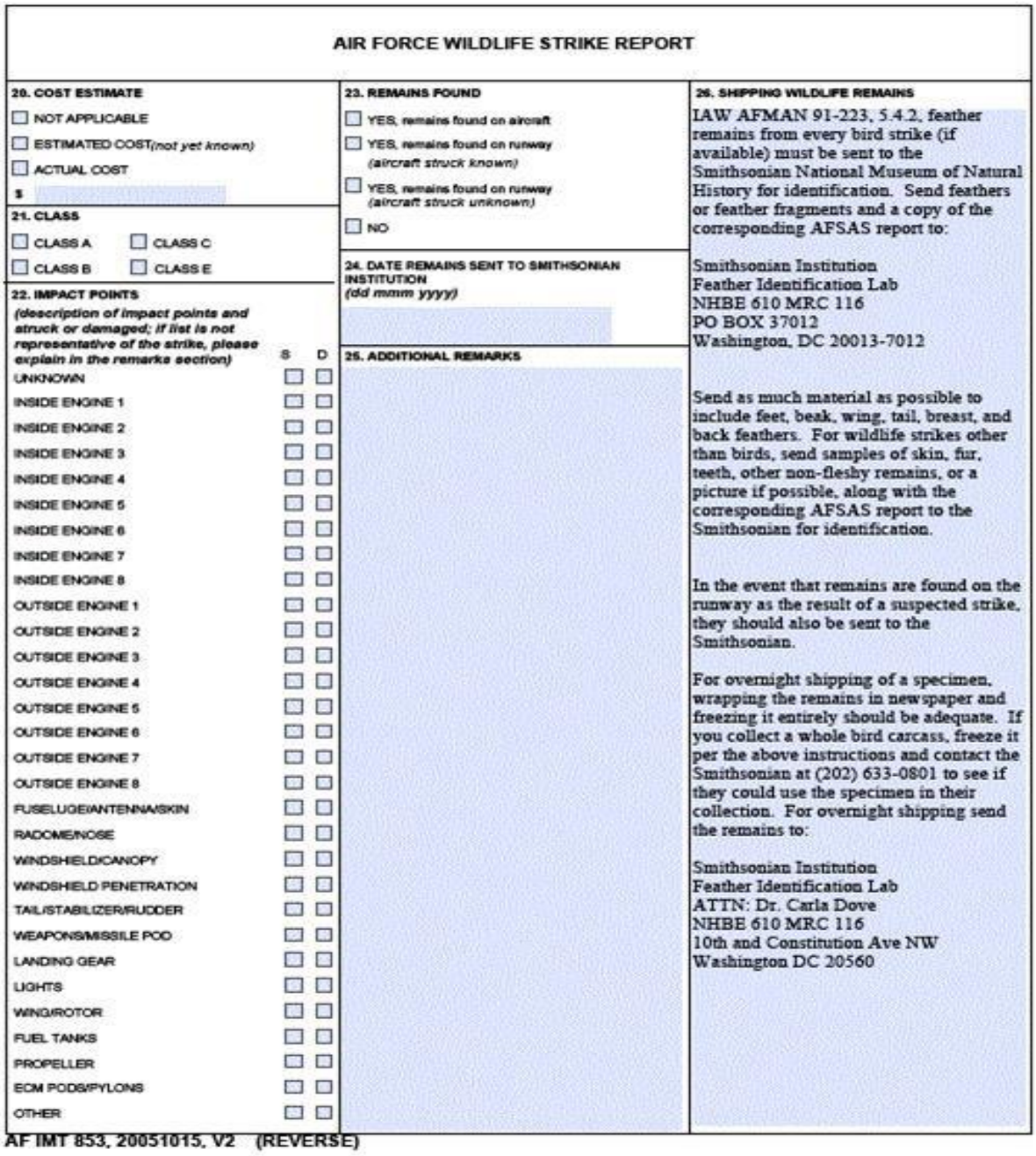
17. WILDLIFE STRUCK
- ☐ UNKNOWN
- ☐ NONE
- ☐ ONE
- ☐ 2-11
- ☐ 11-100
- ☐ MORE THAN 100

18. AVIAN HAZARD ADVISORY SYSTEM
- ☐ UNKNOWN
- ☐ NO REPORT
- ☐ LOW
- ☐ MODERATE
- ☐ SEVERE

19. REMARKS ON LOCATION

AF IMT 853, 20051015, V2

Figure A7.4. AF Form 853 Air Force Wildlife Strike Report (Back).



AIR FORCE WILDLIFE STRIKE REPORT

20. COST ESTIMATE

- ☐ NOT APPLICABLE
- ☐ ESTIMATED COST *(not yet known)*
- ☐ ACTUAL COST

$

21. CLASS

- ☐ CLASS A ☐ CLASS C
- ☐ CLASS B ☐ CLASS E

22. IMPACT POINTS

(description of impact points and struck or damaged; if list is not representative of the strike, please explain in the remarks section)

	S	D
UNKNOWN	☐	☐
INSIDE ENGINE 1	☐	☐
INSIDE ENGINE 2	☐	☐
INSIDE ENGINE 3	☐	☐
INSIDE ENGINE 4	☐	☐
INSIDE ENGINE 5	☐	☐
INSIDE ENGINE 6	☐	☐
INSIDE ENGINE 7	☐	☐
INSIDE ENGINE 8	☐	☐
OUTSIDE ENGINE 1	☐	☐
OUTSIDE ENGINE 2	☐	☐
OUTSIDE ENGINE 3	☐	☐
OUTSIDE ENGINE 4	☐	☐
OUTSIDE ENGINE 5	☐	☐
OUTSIDE ENGINE 6	☐	☐
OUTSIDE ENGINE 7	☐	☐
OUTSIDE ENGINE 8	☐	☐
FUSELUGE/ANTENNA/SKIN	☐	☐
RADOME/NOSE	☐	☐
WINDSHIELD/CANOPY	☐	☐
WINDSHIELD PENETRATION	☐	☐
TAIL/STABILIZER/RUDDER	☐	☐
WEAPONS/MISSILE POD	☐	☐
LANDING GEAR	☐	☐
LIGHTS	☐	☐
WING/ROTOR	☐	☐
FUEL TANKS	☐	☐
PROPELLER	☐	☐
ECM PODS/PYLONS	☐	☐
OTHER	☐	☐

23. REMAINS FOUND

- ☐ YES, remains found on aircraft
- ☐ YES, remains found on runway *(aircraft struck known)*
- ☐ YES, remains found on runway *(aircraft struck unknown)*
- ☐ NO

24. DATE REMAINS SENT TO SMITHSONIAN INSTITUTION *(dd mmm yyyy)*

25. ADDITIONAL REMARKS

26. SHIPPING WILDLIFE REMAINS

IAW AFMAN 91-223, 5.4.2, feather remains from every bird strike (if available) must be sent to the Smithsonian National Museum of Natural History for identification. Send feathers or feather fragments and a copy of the corresponding AFSAS report to:

Smithsonian Institution
Feather Identification Lab
NHBE 610 MRC 116
PO BOX 37012
Washington, DC 20013-7012

Send as much material as possible to include feet, beak, wing, tail, breast, and back feathers. For wildlife strikes other than birds, send samples of skin, fur, teeth, other non-fleshy remains, or a picture if possible, along with the corresponding AFSAS report to the Smithsonian for identification.

In the event that remains are found on the runway as the result of a suspected strike, they should also be sent to the Smithsonian.

For overnight shipping of a specimen, wrapping the remains in newspaper and freezing it entirely should be adequate. If you collect a whole bird carcass, freeze it per the above instructions and contact the Smithsonian at (202) 633-0801 to see if they could use the specimen in their collection. For overnight shipping send the remains to:

Smithsonian Institution
Feather Identification Lab
ATTN: Dr. Carla Dove
NHBE 610 MRC 116
10th and Constitution Ave NW
Washington DC 20560

AF IMT 853, 20051015, V2 (REVERSE)

Attachment 8

UNIT SELF INSPECTION CHECKLISTS

A8.1. These checklists are available for distribution by 35 SEF to remind all tasked agencies of their responsibilities in the BASH program and to ensure their compliance.

Figure A8.1. 35FW BASH Compliance Checklist.

35 FW/SEF BASH PLAN COMPLIANCE CHECKLIST:

- ○ Have you conducted the annual review/update of the 35 FWI91-212? (BASH Plan)?
- ○ Has all Misawa AB BASH information been collected, compiled and disseminated to the BHWG
- ○ Is the Bird Strike Map updated and distributed to the BHWG and the base flying squadrons?
- ○ Is BASH Abatement Team training current, recall roster updated and disseminated to Airfield Management?
- ○ Are the BASH ammunition and weapons accounts current, and are the weapons properly maintained?
- ○ Is the BASH Prevention Checklist current and distributed to appropriate agencies?
- ○ Are the BASH Individual Unit Self Inspection Checklists current and distributed at the BHWG meetings or semiannually?
- ○ Are you coordinating and conducting the BHWG meetings semiannually?

35 FW/PA BASH PLAN COMPLIANCE CHECKLIST:

- ○ Are you providing information/programs to inform base personnel and the general public of the measures being taken to control bird/wildlife activity?
- ○ Do you provide photographic services as required to document bird strikes and related activities?
- ○ Do you provide graphic support to 35 FW/SEF and Airfield Management to publicize bird hazards and mitigation actions?

35 OG BASH PLAN COMPLIANCE CHECKLIST:

- ○ Is a Bird Watch Condition (BWC) established at all times?
- ○ Do pilots make timely PIREPS of bird activity?
- ○ Are appropriate procedures published to familiarize pilots with BWC and bird hazard avoidance?
- ○ Do Squadron Flight Safety Officers ensure current bird activity data is available for mission planning and briefings?
- ○ Is the AF form 853, Air Force Wildlife Strike Report readily available in each squadron?
- ○ Do ops personnel know the proper actions and notifications to take after a bird/wildlife strike?

35 OGV BASH PLAN COMPLIANCE CHECKLIST:

- ○ Are SOFs trained in BASH prevention efforts?
- ○ Does the SOF determine the Bird Watch Condition (BWC) during 35 FW flying periods?
- ○ Does the SOF change the BWC as appropriate for known and reported bird activity?
- ○ Does the SOF initiate BASH hazard response when needed through Airfield Management?
- ○ Does the SOF record significant Bird/wildlife activity in the daily SOF report?

35 OSS/OSCX (Draughon Range) BASH PLAN COMPLIANCE CHECKLIST:

- O Do range controllers declare a Bird Watch Condition (BWC) in accordance with the BASH Prevention Checklist (Annex E)?
- O Do range controllers report BWC changes to Airfield Management and to the SOF?

35 OSS/OSA (Airfield Management) BASH PLAN COMPLIANCE CHECKLIST:

- O Do you declare the Bird Watch Condition (BWC) during non 35 FW flying periods?
- O Do you act as the 35 FW lead for BASH coordination at the Misawa City Airport?
- O Are operational instructions for all approved lethal and non-lethal techniques established?
- O Are all weapons and pyrotechnics stored and maintained and accounted for in a proper licensed facility at the Airfield Management building?
- O Do you provide initial response to wildlife threats?
- O Are the BASH cannons fired throughout the day as needed?
- O Is the BWC and wildlife hazards posted for transient aircrews?
- O Are timely reports of BASH hazards or strikes reported to the SOF and to 35 FW/SEF?
- O Are three BASH inspections of the airfield accomplished daily and logged in the AF IMT 3616 Event Log?
- O Are discovered remains collected and give to 35 FW/SEF?
- O Do you maintain a 4-whell drive vehicle for BASH Team use and other deterrence operations?
- O Is a copy of the BASH Team Recall Roster kept and used as an access list to BASH weapons and munitions in accordance with chapter 4 of the 35 FWI91-212?

35 OSS/OSAL (ATC Liaison) BASH PLAN COMPLIANCE CHECKLIST:

- O Have you coordinated with JASDF ATC controllers to ensure BASH activity found on radar or reported by pilots is reported to Airfield Management and the 35 FW SOF?
- O Do ATC controllers issue Bird Watch Conditions (BWC) advisories to pilots?
- O If the BWC is Moderate or Severe, does ATC provide the BWC on ATIS?
- O Does ground control give priority to the BASH Team when accessing runway and ramp areas?
- O Is the MOUI FB5205-92-3005 properly coordinated and updated with the JASDF?
- O Do you report issues to the BHWG and 35 SEF?

35 MXG (Maintenance Group) BASH PLAN COMPLIANCE CHECKLIST:

- O Do personnel report hazardous bird activity to Airfield Management?
- O Do personnel immediately report discovered/suspected bird strikes found on aircraft to 35 FW/SEF, 13/14 Ops desks, and QA?
- O Do maintenance personnel know the proper actions and notifications to take after a bird/wildlife strike?

35 CES (Civil Engineering Squadron) BASH PLAN COMPLIANCE CHECKLIST:

- O Do you provided input and advice at the BHWG meetings?
- O Is the BASH plan airfield mowing and seeding incorporated into the Integrated Natural Resources Management Plan?
- O Are grass height kept between 7-14 inches?
- O Are bare areas eliminated through sod or Hydro-seeding?
- O Is airfield ponding reduction coordinated through the Host Nation and Parallel Runway Project and QKKA 04-1511 In-House Drainage Project?
- O Does the airfield meet edge effect policies?
- O Are buildings, hangars, and permanent fixtures bird proofed as needed to the max extent possible?
- O Are airfield surveys coordinated through the BHWG for BASH problem areas?
- O Is the base mowing map maintained and updated in the MOUI FB5202-92-3005?
- O Is a Tree Cutting Plan maintained and coordinated through GOJ?

35 SFS (Security Forces Squadron) BASH PLAN COMPLIANCE CHECKLIST:

- O Do you provide M870 shotgun training to BASH team members when coordinated?

NAVAL AIR FACILITY, MISAWA (NAFM) BASH PLAN COMPLIANCE CHECKLIST:

- O Do you provide a representative to the BHWG and support the BASH plan?
- O Do you provide the 35 SEF (226-2710) with information on bird strikes to Naval Aircraft?

Attachment 9

Legal Review Memo

Figure A9.1. Legal Review Memo.

DEPARTMENT OF THE AIR FORCE
35TH FIGHTER WING (PACAF)
MISAWA AIR BASE, JAPAN

23 January 2025

MEMORANDUM FOR 35 FW/SEF

FROM: 35 FW/JA

SUBJECT: BASH Program Legal Review

1. **BLUF**: The bird abatement program proposed by the 35th Fighter Wing Safety Office (35 FW/SEF) is consistent with applicable laws and regulations.

2. **FACTS**: Birds present a strike hazard for aircraft at Misawa Air Base. Bird strikes can cause loss of funds, assets, and human life. The Bird/Wildlife Aircraft Strike Hazard (BASH) Abatement Team (BAT) program governs the use of non-lethal and lethal methods to minimize bird activity on the airfield while aircraft are present in order to reduce/eliminate this hazard. The BAT will include the of use lethal methods (specifically the use of shotguns/air rifles) to kill one or more birds on the airfield in conjunction with non-lethal methods (such as BASH cannons and pyrotechnic noisemakers). This combined strategy prevents birds from becoming accustomed to the non- lethal methods, strongly enhances their effectiveness, and thereby significantly reduces the bird strike hazard on the airfield. The plan is only to be implemented on the installation. Over time, it is expected that this strategy will save lives and millions of dollars in Department of the Air Force property. 35 FW/SEF will, when possible, not use lethal means to mitigate threats posed by threatened or endangered birds.

3. **LAW**:

a. IAW DAFI 91-212, para 2.1 and 2.2, 35 FW/SEF is tasked with establishing a local Bird/Wildlife Aircraft Strike Hazard plan in order to provide "the safest flying environment possible." As part of this responsibility, 35 FW/SEF must establish a plan to mitigate risks presented by birds and other wildlife. *Id.* at para. 1.3.9.1. At a minimum, the plan must be tailored to local conditions and meet all criteria contained within DAFI 91-212, paragraphs 2.2.1.1 – 2.2.1.12.

b. In addition to complying with DAFI 91-212 requirements, the BASH program must comply with applicable international law. Guidelines applicable to the execution of the BASH program can be found in the Japanese Environmental Governing Standards (JEGS), specifically chap. 3, para. 3.4.1.4, which states that installations are responsible for monitoring and managing the status of endangered species on their property and that they must protect

them and ensure their long-term sustainability. The Status of Forces Agreement (SOFA) does not directly address the United States Armed Forces' ability to manage wildlife, but in Article III, para. 1 of the SOFA, it does establish that in facilities and areas owned by the United States, the U.S. "may take all the measures necessary for their establishment, operation, safeguarding, and control."

4. **ANALYSIS:** The SOFA between the U.S. and Japan contains a broad grant of authority to enable the U.S. to ensure the safety of their installation ("all measures necessary"). This provides the 35 FW/SEF sufficient latitude to implement the BASH program requirements outlined in DAFI 91-212. The proposed BASH plan does not operate outside the authority granted under the SOFA nor does it violate any other provisions of the SOFA. Additionally, the BASH plan mandated that all non-lethal means for dispersing endangered or threatened species will be exhausted before lethal force is used. This provision both satisfies the JEGS requirement to ensure the long-term sustainability of endangered wildlife populations and promotes good relations with the host nation.

5. **CONCLUSION:** The BASH plan is both compliant with international law and is unlikely to injure relations with the Government of Japan. If you have any questions or concerns, please contact the undersigned at DSN 226-4022.

GEORGE.CARTER.MATTHEW.1595083490 Digitally signed by GEORGE.CARTER.MATTHEW.1595083490 Date: 2025.01.23 13:05:45 +09'00'

CARTER M. GEORGE, SrA, USAF

Ops and International Law Paralegal

I concur.

TALIPOVA.MANZURAKHON.SHUHRATOVNA.1591162809 Digitally signed by TALIPOVA.MANZURAKHON.SHUHRATOVNA.1591162809 Date: 2025.01.23 15:12:04 +09'00'

MANZURAKHON S. TALIPOVA, Capt, USAF

Chief, Ops and International Law

Attachment 10

DISTRIBUTION LIST (ELECTRONIC)

Figure A10.1. Distribution List.

35 FW/CC
35 FW/CD
35 FW/SE
35 FW/SEF
35 FW/PA
35 OG/CC
35 OG/OGV
35 OSS/CC
35 OSS/OSA
35 OSS/OSO
35 OSS/OSAA
35 MSG/CC
35 SFS/CC
35 CES/CC
35 CES/CEAN
35 CES/CEIE
35 CS/SCOSP
35 CES/CEOIE
35 SFS/S4
35 MXG/CC
35 MXS/CC
13 FS/CC
13 FGS/CC
14 FS/CC
14 FGS/CC
Naval Air Facility (NAF) Misawa
3rd Air Wing (JASDF) Safety
JASDF/ATC
JASDF Base Operations
HQ PACAF/SE
5 AF/SE
Misawa City Airport Manager

Attachment 11

Security Instructions/Records of Changes/Review

Figure A 11.1. Security Instruction/Records of Change/Review.

SECURITY INSTRUCTIONS/RECORD OF CHANGES/REVIEWS

1. TITLE: The long title of the plan is 35 Fighter Wing Instruction 91-212, *Bird/Wildlife Aircraft Strike Hazard Program*. The short title is 35 FWI 91-212. All titles are unclassified.

2. SECURITY CONSIDERATIONS: This document is CONTROLLED UNCLASSIFIED INFORMATION (CUI). Information contained herein will be disseminated only to those agencies and personnel whose official duties specifically require knowledge of the plan, including those agencies required to conduct support planning. Provisions of AFI 10-701, *Operations Security (OPSEC)*, AFMAN 17-1302-O, *Communications Security (COMSEC) Operations*, and DoDM 5200.01/AFMAN 16-1404, *Information Security Program*, were considered during the development of this plan. OPSEC/COMSEC annexes are not required; however, their principles apply to the implementation of the procedures contained within the plan.

3. REPRODUCTION: Reproduction of this document in whole or in part is prohibited except as required for tasked units and friendly forces preparation of planning, supporting and briefing documents as well as supporting checklists.

4. REVIEW: All tasked agencies will review this plan biennially and updated as required. Properly document completion of each biennial review using the "Record of Review" area below.

5. DISPOSITION: Dispose of this document IAW Air Force Records Information Management System (AFRIMS), Table and Rule: T 10-04R 02.00, Support Plans, and DoDM 5400.07_AFMAN 33-302, *Freedom of Information Act Program*.

RECORD OF CHANGES

Change Number	Date Posted	Posted By

RECORD OF REVIEW

Reviewed By	Date Reviewed	Remarks

Attachment 12

PLAN SUMMARY

Figure A12.1 PLAN Summary.

PLAN SUMMARY

1. **PURPOSE**: The purpose of this plan is to establish procedures to minimize bird/wildlife strike hazards (BASH) on Misawa Air Base. This instruction applies to the BASH program operations of manned and unmanned aircraft, remotely piloted aircraft (RPA), small-unmanned aircraft systems (sUAS), and space vehicles. Aircraft collisions with wildlife cause millions of dollars in damage annually resulting in the potential loss of combat capability, safety of aircrews, and damage/loss of aircraft. Damage to airfield infrastructure by burrowing animals degrades airfield surfaces, presenting additional hazards. Wildlife strike hazards to aircrew and aircraft (as well as operations and maintenance expenditures) may be significantly reduced by utilizing an integrated program.

2. **CONDITIONS FOR IMPLEMENTATION**: Execution of this plan is continual and ongoing. BASH concerns are higher during Phase II periods but are a concern during the other Phases. Implementation should occur during any time wildlife may have an impact on the safety of flight or residents of the installation.

3. **OPERATIONS TO BE CONDUCTED**: Reference plan.

4. **KEY ASSUMPTIONS**: This section outlines key assumptions that apply to the plan in general. Assumptions that are unique to specific portions of the plan are that the occurrence of wildlife can happen at any moment and without warning. The Misawa Air Base BASH Abatement Team (BAT) will respond accordingly.

5. **OPERATIONAL CONSTRAINTS**: Identification of protected and endangered species without a qualified UDSA biologist is difficult and not exact. Government of Japan (GOJ) has an extensive list of protected, endangered, and national monuments that have to be handled with sensitivity and caution.

6. **TIME TO COMMENCE EFFECTIVE OPERATIONS**: This plan is executable at all times.

7. **COMMAND RELATIONSHIPS**: Normal Command relationships apply.

8. **LOGISTICS**: This plan is considered logistically feasible.

9. **COMMANDERS APPRAISAL**: N/A

10. **CONSOLIDATED LISTING AND IMPACT ASSESSMENT OR SHORTFALL OR LIMITING FACTORS**: None

Attachment 13

LETTER OF TRANSMITTAL, 35 FIGHTER WING INSTRUCTION 91-212, BIRD/WILDLIFE STRIKE HAZARD PROGRAM

Figure A 13.1. Letter of Transmittal, 35 Fighter Wing Instruction 91-212, Bird/Wildlife Strike Hazard Program.

DEPARTMENT OF THE AIR FORCE
35TH FIGHTER WING
MISAWA AIR BASE, JAPAN

27 Mar 2025

MEMORANDUM FOR DISTRIBUTION (See Attachment 10)

FROM: 35 FW/CC

SUBJECT: Letter of Transmittal, 35th Fighter Wing Instruction 91-212, *Bird/Wildlife Strike Hazard Program*

1. Attached is 35th Fighter Wing Instruction 91-212, *Bird/Wildlife Strike Hazard Program*. This plan provides guidance and outlines procedures to:

   a. To provide a guide for prevention, mitigation, depredation, and reporting/investigation actions to be taken when bird/wildlife hazards are present on Misawa Air Base or Draughon Range.

   b. To ensure proper reporting and prevention of strike hazards as well as conservation of fauna and flora.

2. This plan is effective on receipt and implemented when hazards exist or as directed by the Wing Commander. This plan supersedes 35 FWI 91-212 dated 15 Dec 2021, which should be disposed of IAW the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

3. This plan fulfills the requirements established in DAFI 91-212.

4. 35 FW Instruction 91-212 was coordinated with all tasked organizations. The office of primary responsibility (OPR) for this document is 35 FW/SEF, DSN 315-226-2710. The office of coordinating responsibility (OCR) is 673 ABW/XPX, 226-2710.

DAVIDSON.PAUL.T.1019061333 Digitally signed by DAVIDSON.PAUL.T.1019061333 Date: 2025.04.15 17:54:15 +09'00'
PAUL T. DAVIDSON, Colonel, USAF
Commander

Attachment:
1. 35 FWI 91-212