EMAILED TO BORROWER 07/23/2024

NATIONAL NAVAL AVIATION MUSEUM (NNAM)
LOAN PROGRAM
2024-2029 LOAN AGREEMENT

1.0. Parties. Pursuant to Public Law 80-421 (10 U.S.C. 2572), by this agreement effective as of 1 JULY 2024 between the United States of America, hereinafter called "the Government," represented by the Director, National Naval Aviation Museum (NNAM), representing the Naval History and Heritage Command, hereinafter called "the Lender," and CITY OF ALAMEDA hereinafter called "the Borrower," incorporated and operating under the laws of the State of CALIFORNIA and located at 950 W. MALL SQUARE, ROOM 239, ALAMEDA, CA 94501. The Government hereby establishes a loan agreement for United States Government property, permanently assigned to the Lender, for a period of FIVE years commencing 1 JULY 2024 and ending 1 JULY 2029 with a possible option for renewal, subject to the stipulations as set forth below. This agreement is not transferrable.

AIRCRAFT/ARTIFACT	BUREAU/SERIAL #	NNAM ACCESSION #
A-4A (A4D-1) SKYHAWK	142200	2008.058.001
A-7B CORSAIR II	UNKNOWN	208.059.001

2.0. Borrower Obligations/Costs. The Borrower has applied, in writing, for the loan of USN historical property, and hereby agrees to accept it on an "as is, where is" basis with no warranties, expressed or implied, to be responsible for any and all arrangements and, in accordance with 10 USC 2572, is required to pay any and all costs, charges, and expenses incident to the loan of this property, including the cost of preparation, removal of any residual hazardous materials, disassembly, packing, crating, handling, transportation, and all other actions incidental to the movement of the loaned property to the Borrower's location, where applicable. In addition, the Borrower will be responsible for all maintenance and preservation of the property. Any exceptions will in accordance with 10 USC 2572 (d) (2) (B).

3.0. Loan Conditions.

3.1. The Borrower agrees that the loaned property shall be used for static display purposes **only**. Under no circumstances will the purpose for the loaned aircraft/artifact be treated in any other way than for static display. An analysis of the building or structure, to include photographs and specifications (size, details of climate control system) will be presented in advance to the NNAM, and NNAM with its sole discretion will advise on suitability for loan acceptability. No parts, ordnance, MERS, TERS, etc., may be affixed to loaned aircraft without prior expressed written consent from the Lender. **No alterations or modifications to aircraft and/or artifacts are to be made without the prior expressed written consent of NNAM.** Loaned aircraft will not be flown or operated, including engine and systems operations, or restored to flying condition **under any circumstances**, nor will they be licensed with the Federal Aviation Administration (FAA). The borrower shall not remove any parts from loaned aircraft for operational usage in any airworthy aircraft. In similar fashion, all other macro and micro artifacts will not be altered or repurposed without the express written consent of the Lender. General Public access to the interior of loaned **aircraft** (cockpit, cargo areas, etc.) is prohibited for reasons of aircraft preservation and public safety. Relocation of all loaned property for temporary special events (parades, ceremonies, air shows, etc.) is not authorized under any circumstances, without prior expressed written consent of the NNAM. No temporary decorations of any type are authorized for display on any loaned property, for any purpose (special event, seasonal display, ceremonies, etc.). Only historically based markings, including crewmember names, may

be used on aircraft and other navy owned equipment and this agreement precludes the use of markings on this equipment for commercial, fundraising, or sponsorship purposes. The Borrower shall obtain expressed written consent from the Lender PRIOR to painting any markings or insignia onto aircraft, especially with respect to names being applied to aircraft. Failure to observe these conditions can result in the immediate repossession of the loaned property by NNAM, at the Borrower's expense.

3.2. Due to the criticality of parts in the operational inventory, there may be occasions that parts may be requested from the NNAM by the Stricken Aircraft Program Office to support military operational requirements. Such parts are internal in nature and removal or replacement generally will not alter the external aesthetic appearance of the aircraft. All such requests for parts removal will be forwarded to the Lender for approval and subsequent notification of Borrower.

3.3. The NNAM does not maintain an inventory of spare parts for use on loaned aircraft. Consequently, the Borrower should take this into account PRIOR to acceptance of a loaned aircraft. Additionally, all contact with the Aerospace Maintenance and Regeneration Group (AMARG) regarding spare parts for use on aircraft loaned from NNAM, *must* be made through NNAM.

3.4. The Borrower agrees not to sub-lease Government property for display at another location without prior written consent of NNAM. The Borrower shall not permit possession of the property or any component of the property in any manner to any third party either directly or indirectly; the Borrower shall not enter into any negotiations with a third party regarding any future disposition of the loaned material, in all or part; and the Borrower shall not do or suffer anything to be done whereby any of the property shall or may be relocated, lost, stolen, injured, or destroyed.

3.5. The Borrower agrees to use the loaned property only in accordance with the instructions outlined in this loan agreement and not, without prior expressed written consent from the Lender, modify, restore, or mount on pylons or any structure above ground in any way, which would alter the original form, design, or the historical significance of said property; the Borrower agrees to perform routine maintenance to include (but may not be limited to) annual upkeep, periodically required painting, repair of damage, day-to-day care, and removal of environment concerns, so as not to reflect discredit on the U.S. Navy; and to display and protect it in accordance with the instructions set forth in Attachments 1 and 2, which are incorporated herewith and made part of this Loan Agreement.

3.6. Any authorized additions, modifications or alterations to the property, equipment or material resulting from efforts, or at the expense of the Borrower with regard to the aircraft, is limited to that approved in writing in advance by the Lender, and will become a permanent part of the aircraft, and will be considered the property of the Lender unless specifically exempted by the Lender; and upon termination of this Loan Agreement or recall of the property, will be included as part of said property.

4.0. Initial Loan Agreement Requirements.

4.1. When warranted by the Lender as a condition to the loan, the Borrower agrees to remove the borrowed item, from its present physical location, within 60 days after execution of this agreement, unless otherwise agreed to by the Lender and made part of this loan agreement, under separate attachment.

4.2. The Borrower agrees to use the loaned property for display and educational purposes only, and to protect the loaned property from vandalism by displaying it only in an enclosed location that provides a safe and secure environment. The Borrower agrees to place the loaned property on display within 90 days or as may be otherwise specified by the Lender following physical acceptance of the loaned property and in accordance with this loan agreement. Separate attachments with instructions will become a part of the original loan agreement if the borrowed item will be subject to restoration, conservation, preservation, as a basis for consideration of the loan. On a biennial basis (every two years), the Borrower agrees to furnish the Lender with a CD/DVD or other approved medium containing digital images of the loaned property within ninety (90) days of the *initial execution of this agreement.* The image file name **must** contain the accession number for that item (e.g. 2015.001.001). For aircraft, images will include views showing all external surfaces including

Bureau/Serial Number, and all accessible interior areas including instrument panels, avionics racks and equipment, aircrew, passenger, cargo and payload compartments, wheel wells, bomb bays, TARPs, Pod, and any mounted ordnance. Digital images for all other artifacts will be of sufficient detail to insure positive identification of each object. This provision is a requirement for each loan period, and referred to as a "Certification of Loaned Government Property" (CLGP). Complete instructions for the CLGP will be furnished to the Borrower by the Lender under separate correspondence.

4.3. The Borrower agrees to display prominently, (and agrees to make available to the lender a photo record) a placard with the property at ALL times which contains the following credit line: **"This aircraft [artifact] loan courtesy of: the National Naval Aviation Museum on behalf of the Navy History and Heritage Command."** Additionally, articles published or submitted for publication or websites that refer to the loaned property must credit the National Naval Aviation Museum as lender of the loaned property with, at a minimum, the words: **"This aircraft [artifact] loan courtesy of: the National Naval Aviation Museum at Pensacola, Florida."**

4.4.a. (Aircraft and/or Engines) The Borrower shall obtain prior to the finalization of any loan and make available a copy therein to the Lender, proof of a Surety Bond for the return transportation costs of any Aircraft and or Engine that may be subject to this loan. Return costs will be based upon return to 1750 Radford Blvd. Bldg. 3221 (Flight Line), NASP Fl. 32508. Inasmuch as the Lender will make reasonable effort to place said aircraft/engine with another borrower, which may result in shorter distances for return, for sake of this loan, a Surety Bond requirement must be based upon proposed return transportation costs to NNAM. SURETY BOND FOR THIS LOAN IS NOT APPLICABLE.

4.4.b. (Definition of Surety Bond as it Relates to NNAM Loans) – A Surety bond is a three-party agreement between the Principal, (Borrower), the Oblige (NHHC through its subordinate command, NNAM) and the Surety in which the Surety agrees to uphold, for the benefit of the Oblige (NHHC through its subordinate command, NNAM), the contractual obligations (Return transportation costs to the NNAM) of the Principal (Borrower), if the Principal fails to do so.

5.0. Subsequent Loan Renewal Requirements.

5.1. On a biennial basis (every two years), the Borrower agrees to furnish the Lender with a CD/DVD or other approved mediums containing digital images of the loaned property. The image file name **must** contain the accession number for that item (e.g. 2015.001.001). For aircraft, images will include views showing all external surfaces including Bureau/Serial Number, and all accessible interior areas including instrument panels, avionics racks and equipment, aircrew, passenger, cargo and payload compartments, wheel wells, bomb bays, TARPs Pod, and any mounted ordnance. Digital images for all other artifacts will be of sufficient detail to insure positive identification of each object. This provision is a requirement for each loan renewal period, and referred to as a "Certification of Loaned Government Property" (CLGP). Complete instructions for the CLGP will be furnished to the Borrower by the Lender under separate correspondence.

5.2. The Borrower agrees to furnish a copy of the most recent annual financial statements **when requested** to include revenue and expense reporting and projected budget for the next operating year. Although NNAM loan agreements are executed in multiyear increments, Borrower agrees to furnish **when requested** a copy of the most recent annual financial statement to include revenue and expense reporting and projected budget at any time during the period covered by the loan agreement. This provision is not applicable for active duty military commands.

5.3. The Borrower agrees to furnish the Lender with a signed inventory.

6.0. Use as Security, Sale or Lease. The Borrower agrees not to use the loaned property as security for any loan, nor to sell, lease, rent, lend, or exchange the property for monetary gain, fundraising or otherwise under any circumstance.

7.0. Professional Photography. The Borrower shall not make or allow the use of the loaned property in any manner for **commercial** still or motion video production without prior written approval of **NNAM.**

8.0. Incident Reporting. The Borrower shall within one (1) working day of discovery, notify the NNAM of any instance of loss, damage, or destruction of the property. Notification to the NNAM must be followed by a report of the incident investigation within 30 days of the event.

9.0. Title. The Borrower shall obtain no interest of any kind in the loaned property by reason of this agreement, and title shall be vested in the Lender at all times.

10.0 Receipt, Custody & Liability.

10.1. This agreement shall be executed prior to the Borrower accepting physical custody of the property unless the asset is already in the possession of the borrower.

11.0. Borrower's Responsibilities.

11.1. The Borrower agrees to indemnify, save harmless, and defend the Lender from and against all claims, demands, actions, liabilities, judgments, costs, and attorney's fees, arising out of, claimed on account of, or in any manner predicated upon personal injury, death, or property damage caused by or resulting from possession and/or use of the loaned property.

11.2. The Borrower will bear full financial liability for the loss or damage of USN loaned historical property resulting from negligence, misconduct, or willful violation of the terms of this agreement.

11.3 (For Artifacts other than Aircraft/Engines) - The Borrower agrees to repair or replace, at the discretion of the Lender, the borrowed item for any and all loss or damages that may be inflicted on the item while the life of the loan is in effect, and/or until the loaned material is returned to the physical custody of the Lender. If the material borrowed is irreplaceable, the borrower may be required to make monetary restitution to the Lender up to and including the full amount of value of the item. (See **Section 4.4.a.)** Should loaned property incur catastrophic damage beyond the Borrower's control, (e.g., resulting from tornado, hurricane, flood, earthquake or other natural disaster), the Borrower will be responsible for all cleanup and removal of the loaned property to the disposal location designated by the NNAM.

11.4. The Borrower will be issued under a separate work process and on a biennial basis, a Certification of Loaned Government Property (CLGP); agrees to report as requested to the Lender on the condition and location of the loaned property. (See **(4.2)** and **(5.1)**) Further, the Borrower agrees to allow authorized Department of Defense representatives access to the Borrower's records and facilities to assure accuracy of information provided by the Borrower and compliance with the terms of this Loan Agreement.

12.0. Display/Maintenance Requirements.

12.1. No aircraft will be renovated, reconfigured, have markings changed, or Bureau/Serial Number altered, or any parts added, removed, or replaced as part of a planned restoration effort without prior expressed written consent of the Director, NNAM.

12.2. The Borrower agrees to maintain loaned aircraft in good material condition including corrosion control, painting, preservations, and maintenance on components such as canopy seals, tires, wing-fold mechanisms. A listing of specific maintenance requirements for display can be found in Section B.

12.3. The Borrower agrees that all aircraft, missiles and artifacts on display will have an identification sign adjacent to each display (**see 4.3**). For aircraft and missiles, note the type, model, and serial number. If (with prior expressed written consent of the Lender), the aircraft or missile has been reconfigured, markings changed, or serial number altered after acquisition for display purposes, it will be stated on the sign and noted in all records as follows:

"The _ (item) __ on display is actually ____ (nomenclature) ___, Bureau/Serial No. ____, but painted and marked to depict ___(nomenclature) ___, Bureau/Serial No. _____, assigned to the ___(unit and/or person) ___ in ___(location or theater) ___ during ___(year) ___."

12.4. For aircraft on which the Bureau/Serial number has been altered for display purposes with prior written approval, the model, design and series (e.g., A-4C) along with the original serial number will be stenciled in two-inch letters using contrasting paint colors on the fuselage under the horizontal stabilizers.

12.5. All record keeping will reflect the true Bureau/Serial number. In the case of an unknown bureau number, it shall be noted as "BuNo Unknown."

12.6. Aircraft Safe for Public Display Checklist & Certification- this Checklist and Certification will be submitted by the Borrower to the Lender prior to public display indicating that the complete checklist has been accomplished with a copy being included in the official file.

13.0. Radioactive Components.

13.1. In accordance with Attachment 1 (National Naval Aviation Museum Loan and Static Display Program), if radioactive items are found reinstalled during later inspections, the borrowing organization will pay the cost of removal of the radioactive items and any decontamination required.

14.0. Loan Termination.

14.1 The failure of the Borrower to observe any of the conditions set forth in this Loan Agreement/Loan Renewal and Attachments 1 and 2 thereto, shall be sufficient cause for the Lender to terminate the loan and repossess the loaned property. Repossession of all or any part of the loaned property by the Lender shall be made at no cost or expense to the Government and shall be borne by the Borrower. The Borrower shall defray all demilitarization, maintenance, freight, storage, crating, handling, transportation and other applicable charges attributable to such repossession and return to Lender. If Borrower is unable to meet the financial responsibilities set forth, a call for the Surety Bond outlined in **Section 4.4.b** will be implemented.

14.2. In the Event the loan is terminated for cause, the provisions of this agreement will remain in effect until all borrowed property has been relocated and or returned to Lender.

14.3. Termination of the loan and subsequent repossession of all or any party of the loaned property at the option of the Borrower shall require no less than 30 days advance notice to the Lender in writing. This requirement may be waived by the Lender only through the provision of a written waiver to the Borrower prior to the return of the loaned property.

14.4. The Lender reserves the right not to renew the loan agreement, in all or part, or to recall the property if required by the Lender to meet the requirements of the NNAM, NAS Pensacola, or other military purposes. In such an event, the Borrower will not be responsible for transportation costs. The Lender will provide a written 30-day notice of intent to recall to the Borrower.

14.5. In the event of recall by the Lender following: the end of the loan agreement period; the borrower no longer has a desire to retain the loan; the Borrower is not abiding by the loan agreement; the Borrower and Lender cannot come to an agreement on a subsequent loan renewal, then all costs associated with the movement of the property from the Borrower's site to NNAM will be accomplished at the Borrower's expense.

15.0. Dispute Resolution. In the event a dispute arises between the parties over the terms of this loan agreement/loan renewal, reasonable attempts will be undertaken to resolve the matter through negotiation between agents appointed, in

writing, by the parties. In the further event that negotiations fail to reach a resolution, the parties agree that federal law will apply and the Federal District Court for the Northern District of Florida at Pensacola, Florida will have exclusive jurisdiction over such matters.

16.0. Acknowledgements.

16.1. Borrowers should recognize that in accepting from NNAM, acting on behalf of the Naval History & Heritage Command, historical property on loan for the purpose of displaying it, that they incur a significant maintenance and security responsibility as listed in the Loan Agreement; Attachment 1, "Instruction for Preparation and Maintenance of Safe for Display Aircraft" and Attachment 2 "Instructions for the Care of Artifacts." Failure to have proper tie downs, repair damage, insurance coverage, perform annual upkeep, ensure proper security requirements, maintain adequate fire suppression systems for loaned items housed inside buildings, etc., may be viewed as gross negligence. While proof of ordinary versus gross negligence is generally a question of fact, and may vary from jurisdiction to jurisdiction, the failure to protect loaned property after proper direction to do so is an act of negligence and possible gross negligence. Black's Law Dictionary, Seventh Edition defines Gross Negligence as "*a conscious, voluntary act or omission in reckless disregard of a legal duty and of the consequences to another party, who may typically recover exemplary damages.*"

16.2. 18 U.S.C. §1001: US Code – Section 1001: Statements or entries generally

(a) Except as otherwise provided in this section, whoever, in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, knowingly and willfully—

(1) Falsifies, conceals, or covers up by any trick, scheme, or device a material fact;

(2) Makes any materially false, fictitious, or fraudulent statement or representation; or

(3) Makes or uses any false writing or document knowing the same to contain any materially false fictitious, or fraudulent statement or entry shall be fined under this title or imprisoned not more 5 years. **(Please note: 16.2 does not apply to active-duty military commands/installations)**

Executed on behalf of the Lender this 23rd day of JULY 2024 at Naval Air Station Pensacola, FL.

UNITED STATES OF AMERICA

Bonnie L. Towne, electronically signed on 07/23/2024

BONNIE L. TOWNE
Title: Aircraft Loan Department
By direction
Agency: National Naval Aviation Museum
Address: 1750 Radford Blvd., Suite B
Pensacola, Florida 32508
Telephone: (850) 452-8451
Email: bonnie.l.towne.civ@us.navy.mil

ACCEPTANCE

The Borrower, through its authorized representative hereby accepts responsibility and delivery of the loaned property subject to the terms and conditions contained in the Loan Agreement set forth above. The Borrower certifies that they have read, understand, and acknowledge that concealing a material fact and/or making a fraudulent statement in dealing with the federal government may constitute a violation of federal law.

Executed on behalf of the Borrower this _____day of _____, ____ at _____.

_____
(NAME OF BORROWER/ORGANIZATION)

_____
(SIGNATURE)

_____
(TYPED OR PRINTED NAME & TITLE)

ADDRESS: _____
_____

TELEPHONE: _____FAX NUMBER: _____

EMAIL (TYPED OR LEGIBLY PRINTED):_____

ATTACHMENT 1

NATIONAL NAVAL AVIATION MUSEUM (NNAM) LOAN AND STATIC DISPLAY PROGRAMS

INSTRUCTION FOR PREPARATION AND MAINTENANCE OF SAFE FOR DISPLAY AIRCRAFT (where applicable)

SECTION A – GENERAL

A. Information:

1. This instruction covers the requirements for the preservation and preparation of aircraft for static display purposes prior to the administrative assignment to the National Naval Aviation Museum (NNAM), performed by qualified personnel identified on Command Letterhead or an authorized Naval representative and annotated accordingly.

2. These requirements are designed to return and/or maintain the aircraft in as near original configuration as possible and to render them safe for public display.

3. Generally, all reconditioning, repairing, and refinishing will be accomplished in accordance with current OPNAV directives and NAVAIR instructions in a manner that would not modify the artifact in any way, thereby altering the original form, design, or the historical significance of said property. Deviations from this standard must be requested in writing with prior approval being in the form of expressed written consent by NNAM.

B. Radiation Safety:

1. Completion of radiation survey will be verified by the NNAM prior to physical transfer of aircraft.

2. Interior of aircraft must be secured and all access prevented until radiation survey is completed. No restoration activity inside or outside the aircraft will be permitted until the radiation survey is completed.

3. Survey of aircraft displayed at non-DOD organizations will be accomplished by Naval History and Heritage Command (NHHC) Radiation Safety Officer or an authorized Naval representative and annotated accordingly.

4. <u>No radioactive components will be reinstalled by the borrowing organization.</u> If radioactive items are found installed during later inspections, the borrowing organization will pay the cost of removal of the radioactive items and any decontamination required.

C. Security Requirements:

1. The aircraft on display and undergoing preparation for display shall be kept secure from unsupervised personnel. The aircraft will be maintained with sufficient security to insure that it is protected from vandalism, theft, or unauthorized removal of components and assemblies.

2. Any theft or unauthorized removal of components or assemblies shall be immediately reported to the local law enforcement agency and by the next business day to the NNAM. Notification to the NNAM must be followed by a report of the investigation of the incident within 30 days of the event.

3. All canopies, doors, access hatches, and access plates, excluding one entrance door, will be permanently sealed shut by any of the following methods to prevent unauthorized entry:

a. Bolting through the hatch to internal crossbars placed across the opening. These can be fabricated from sturdy steel strapping or channel iron or aluminum.

b. Riveting the door securely to the jamb section.

c. Attaching hasp internally and securing with inside padlock.

d. Whatever method is employed to secure doors and access hatches, the crevices remaining will be filled with caulking compound or elastic putty to prevent internal damage from rain, snow, dust, and ice. A hasp welded or riveted in place must secure the access door that is not permanently sealed. Multiple locks (two or three) are preferable, each with a separate key or combination. This technique will reduce the possibility of unauthorized access but will provide emergency and maintenance entry for authorized personnel.

D. Maintenance Records:

1. Whenever items are permanently removed, the removal and disposition of such items shall be annotated on a NNAM maintenance log form (available from NNAM) and a copy forwarded to the NNAM loans and acquisitions department for record (prior approval of work must be approved by the NNAM).

2. All work items that are accomplished shall be listed and signed off on the NNAM maintenance log.

3. Utilizing the maintenance log, a detailed accounting will be maintained by the borrower of all items removed or installed with the date of installation/removal and the name of the individual(s) performing the work.

4. Copies of all maintenance records must be returned to the NNAM with the biennial Certification of Loaned Government Property (CLGP) for preservation.

E. References:

The work requirements listed herein have been developed in accordance with the following directives: DOD 4160.28, NAVAIR 01-1A-35, and applicable aircraft Maintenance Instruction Manuals (MIMs)

SECTION B – REQUIREMENTS

A. Demilitarize all Armament Systems and Explosive Material:

1. Disarm all systems in accordance with the applicable MIMs and certify action in accordance with Aircraft Reclamation and Demilitarization Procedures sign-off sheet (provided by NNAM). Warning: disarming, removal, and disposal must be accomplished by qualified personnel identified on Command Letterhead or an authorized Naval representative and annotated accordingly.

2. Aircraft intended for outdoor display must have all weapons less than 30MM (machine guns, cannons) removed. Only simulated weapons may be used. No weapons of any type may be loaned to non-Department of Defense (DOD) organizations.

B. Prepare Power Plant for Permanent Storage:

1. Prepare engines for permanent storage (if applicable).

2. Disconnect and drain all water and oil lines, tanks, valves, and pumps. Reconnect lines and reinstall plugs after draining (if applicable).

3. Clean excess oil and grease from exterior components of engines (if applicable).

4. Check power plant cowling for corrosion and damage. Repair and refinish as necessary or utilize suitable substitutes.

5. Install intake and exhaust protective covers. Standard covers may be used if available, or suitable substitutes.

6. Clean and preserve propeller domes.

7. Clean deicer boots and apply approved corrosion preventive compounds.

8. Clean and check metal components of propellers for corrosion. Treat any affected areas and refinish to standard configuration.

C. Defueling and Purging Fuel Systems:

1. Defuel, low point drain, depuddle (providing fuel cells are accessible without major component removal, e.g., wings), and purge all internal and external fuel cells for 24 hours.

2. Spray or seal fuel cells with an approved corrosive preventive compound (10-10 oil) as applicable.

3. Drain water injection systems and deicing fluids whenever found.

D. Nitrogen Precharge:

1. All pressure gaseous shall be depleted and rendered inert or holding system removed.

E. Wing fold:

1. Shall be in the down-locked position or folded with wing lock devices installed for display (if applicable).

F. Prepare Landing Gear:

1. Release high-pressure gas from all landing gear shock struts.

2. Clean and preserve struts, paying particular attention to oleos (chrome) and exposed cylinders.

3. Clean all wheels and other landing gear components.

4. Check and remove corrosion. Repaint to standard configuration.

5. Check all tires for excessive wear and adjust pressure as required.

6. Secure all retractable landing gear in the down position with positive lock devices. Tailhook nitrogen precharge depleted and Tailhook should be secured (if applicable).

G. Prepare Hydraulic Systems:

1. Dissipate hydraulic system pressure and release air from hydraulic accumulators (if applicable).

2. Disconnect and drain all hydraulic reservoirs, valves, and pumps. Reconnect and reinstall drain plugs after draining (if applicable).

3. Clean all exposed finished surface and actuating rods, hydraulic cylinders, locks and valves. Other hydraulic equipment will be cleaned and coated with an approved corrosion preventative compound.

H. Prepare Oxygen Systems:

1. All pressure gaseous or liquid oxygen system cylinders and converters shall be disconnected, drained, and rendered inert or removed (if applicable).

2. Stow all oxygen mask, bottles, and hoses. Remove all oxygen masks from aircraft displayed outside and store in a secure area conducive to preservation (if applicable).

3. Install dust plug in filler valves and recharge hoses (if applicable).

I. Prepare Electrical Systems:

1. Remove all aircraft batteries and dispose of them through authorized sources and procedures.

2. Remove dry cell batteries from frequency meters and other equipment (if applicable).

3. Pull all circuit breakers, only on non-radioactive (white plastic shank) type. Contact NNAM for a radiation survey of circuit breakers in questions, and for assistance with problems. Do not pull radioactive circuit breakers open, as deteriorated radium paint may be scattered in the process to created possible hazards (if applicable).

J. Prepare Electronics Systems:

1. Leave all electronic equipment that is not reclaimed installed on the aircraft.

2. Radioactive materials have been removed or certified to contain acceptable levels by a qualified radiation inspector (if applicable).

3. Coat exposed metal whip antennas and mechanical items with an approved corrosion preventive compound.

4. Stow all connectors from equipment that has been removed.

K. Miscellaneous Utilities:

1. Remove bottles from all fire extinguishing systems, dissipate and reinstall. Caution: Insure all chemicals are disposed of in accordance with established State and Federal Government policies (if applicable).

2. Drain and clean entire drinking water system (if applicable).

3. Drain, clean, and reinstall coffee jugs and water jugs (if applicable).

L. Prepare Airframe:

1. Check airframe for corrosion and treat affected areas in accordance with standard aviation practices.

2. Clean all debris and foreign material from interior of fuselage.

3. Check airframe for external damage and repair in accordance with standard aviation industry practices.

4. Cover all openings that will allow the entrance of water or other foreign matter that may have a corrosive or other deteriorating effect. Use standard covers if available, or suitable substitutes. Additional protection may be incorporated for aircraft placed in outside storage.

5. Check all fuselage, wing, and empennage drain holes for obstructions. Outside storage or display may necessitate additional or larger drain holes to ensure proper drainage. Drain holes should be periodically probed to mitigate obstructions (if applicable).

6. Clean and treat lavatory and relief facilities or systems (if applicable).

7. Check all astrodomes and plastic panels for crazing and damage, repair and/or replace as necessary. Clean all plastic panels thoroughly with soap and water.

8. Inspect for water trapped in lower portions of fuselage. If water is present, comply with instructions contained in applicable MIMs for removal and correction.

M. Prepare Control Surfaces:

1. Check all control surfaces for corrosion, rot and insect infestation. Treat, repair or replace the affected areas.

2. Check all control surfaces for external damage and repair areas as necessary for display purposes.

3. Inspect all fabric-covered control surfaces, repair or recover as necessary.

4. Check all control surfaces, attaching mechanisms for loose rivets and/or sheared bolts; repair or replace as necessary.

5. Secure all movable surfaces in a neutral position with positive locking devices.

N. Final Preparation:

1. Entire aircraft cleaned and refinished as required.

2. Secure aircraft by attaching wheel chocks.

3. Place aircraft on surface concrete or asphalt of sufficient strength to support ramp weight of the aircraft. This will not apply if the recipient, with written permission of the NNAM, mounts the aircraft and attaches it to a pylon for public display (engineering drawings and specifications must be submitted to NNAM for approval).

4. Aircraft displayed inside are normally supported on pneumatic tires but must be placed on display stands sufficient in height to provide mild tire contact with the display surface. Tires should be inflated which will maintain their inflated shape and support the weight of the aircraft for the life of the casing.

5. Remove all antenna wires that could serve as a bird roost.

6. Install bird proofing on all aircraft openings, including intake and exhaust covers.

7. Flag or cover all protruding objects of a hazardous nature.

O. Coordination:

1. Deviation from the procedures outlined in the attachment must be requested in writing and require written approval from the NNAM prior to deviation.

ATTACHMENT 2 (where applicable)

NATIONAL NAVAL AVIATION MUSEUM (NNAM) LOAN

AND STATIC DISPLAY PROGRAMS

INSTRUCTIONS FOR THE CARE OF ARTIFACTS

A. Information:

1. These general guidelines are provided to fulfill the NNAM's obligation to ensure the preservation of the collection, and to define the responsibilities of organizations that retain historic property for display.

2. Under normal circumstances, objects will not be made available from the NNAM unless the basic measures for preservation and conservation listed below have already been accomplished. However, regardless of the state of preservation at the time of receipt, an assessment must be made and all appropriate measures taken to ensure continued preservation of historical property. All items must be properly prepared for preservation, placed in a safe environment, inspected periodically, and preserved when necessary.

B. Damage Threats to Artifacts: The threats of damage or deterioration to artifacts generally come from four sources:

1. People – The greatest threat to the continued survival of an artifact comes from people. This is a result of mishandling the artifact resulting in mechanical breakage, soiling from unprotected hands (fingerprints), improper cleaning methods, and incorrect attempts at preservation or repairs (making it "look" better). Unfortunately, theft must also be included in this category.

2. Light – Light, a form of radiation, is damaging too many materials, especially fabrics. This damage is first observed as the fading of colors, followed ultimately, by the breakage of fabric fibers. The most harmful portion of the light spectrum is the ultra-violet (UV).

a. All historical property on loan from the NNAM that is on interior exhibit will not be exposed to a light level from any source, which exceeds 200 lux or 20 foot-candles. The acceptable level for most museum objects falls between 50 and 200 lux or 5 and 20 foot-candles. Sensitive objects, such as artwork, color/black and white photographs, and textiles should have their intensity levels adjusted downward toward lower limits and/or limited exposure time. (Remember, there is a reciprocity law between intensity (lux) and time of exposure: 10 hours of exposure @ 50 lux has the same damaging effect as 1 hour @ 500 lux); therein lays the reasoning behind either lowering the intensity of the source or limiting the time of exposure.

b. The most harmful portion of the light spectrum is the ultra-violet (UV). The most common source of UV radiation is natural sunlight and fluorescent tube lighting. Normal incandescent lighting is low in UV radiation. UV level is measured in Microwatts per Lumen using the Crawford Light Meter. The acceptable UV level for historical property on loan from the NNAM for interior exhibit will not exceed 75 MW per Lumen. Levels below 25 MW per Lumen are preferable. Protection of UV is accomplished by avoidance or shielding. Shielding of UV producing light source, such as direct or diffused sunlight and all fluorescent lighting, requires UF Plexiglas or solar screen UV filtering sleeves, which slide onto fluorescent tubes. Two grade of UV

protection are commonly available in sheet Plexiglas: U/F3, which blocks UV at around 400nm, and U/F 5, which blocks UV from about 375 nm to 400 nm. U/F 5 is preferable, due to its greater range of protection. All UV filtering media have a life span of about 10 years, after which they must be changed to maintain their effectiveness.

3. Environment – The most common environmental threats are normally associated with heat and humidity. Ideally, an artifact is both stored and displayed in a constant heat of 68 degrees (never to exceed 72 degrees) and 50% humidity. Of the two, humidity is the most destructive. Rapid changes in humidity, accelerated and exaggerated by temperature changes, are the most destructive and to be avoided. Excessive heat in displays is usually associated with improper use of incandescent lights (low in UV but high in radiated heat). Excessive heat and/or humidity also create a more favorable environment for the growth of molds and fungus as well as rust/corrosion. In addition, an environmental consideration would be chemical contamination of the environment. Examples of this would be the fuming of formaldehydes from unsealed plywood or the contact of artifacts with "normal" paper products, which all have a high acid content.

4. Animal/Insect – The ideal environment for the preservation of artifacts unfortunately also becomes the ideal environment for animal and insect life. Both forms can be highly destructive. The first line of defense is the cleanliness of the materials and mechanical barriers for entrance. Close and frequent inspections will provide early detection of such life. If and when detected, remember many of the methods of elimination are also destructive to artifacts.

C. General Guidelines for all Artifacts: Since the collection is comprised of objects of practically every material or combination of materials, it is best to prescribe their treatment and care in general terms.

1. All artifacts must be protected from harmful exposure and maintained in as stable an environment as possible. Preservative treatments and mounting methods will vary with each item depending on its material(s), condition, and display attitude. The following are some important rules for artifacts on loan from NNAM:

a. **Never perform a preservation treatment on and item without consultation and written approval from NNAM**

b. **Never modify an object in such a way as to alter or compromise its integrity, authenticity, or uniqueness for the purpose of displaying it. Plans/designs proposing the manner in which loaned artifacts will be displayed will be forwarded to NNAM for consideration and approval prior to any artifact being placed on display.**

c. **Provide appropriate physical security** against vandalism or outright theft through the use of locked or sealed display cases. Security should be commensurate with the object value. (For example, a gold World War I pilot's badge requires far more protection than a nickel-chrome plated 1950 vintage pilot's wings.)

2. If you are in doubt about a proposed object's treatment or preparation for display, do not do anything. Contact the NNAM Curator for guidance or assistance.

D. Preservation of Organic Objects: (Wood, leather, bone, ivory, wool, cotton, silk & synthetics such as rayon, nylon, etc.)

1. Organic objects must be shielded from ultra-violet light, which breaks down coloring pigmentation as well as the fibers themselves. This requires shielding of any UV producing light source such as direct or diffused sunlight and all fluorescent lighting with either UF-3 Plexiglas or solar screen UV filtering sleeves, which slide on to fluorescent tubes. Such products are commonly available.

2. Keep organic objects clean, dust free, infestation guarded, and in a stable, non-fluctuating atmosphere as near to 68 degrees Fahrenheit temperature (never to exceed 72 degrees) and 50 percent relative humidity as possible. Severe damage can result from either extremes of high or low temperature or humidity, but it is the fluctuation between extremes that causes the most deterioration.

3. All artifacts should be handled only while wearing photo handler's /archivist's gloves.

4. In short, good housekeeping and environmental control are essential in preserving all museum objects.

E. Preservation of Inorganic Objects: (Metal objects, rubber, glass, porcelain, plastics, and various other synthetics.)

1. Most metal objects will oxidize, tarnish and corrode. Thus, it is important to provide protection for metal artifacts. This can be achieved by observing the guidelines for environmental control and housekeeping. Never handle metal objects with bare hands. Perspiration and acidic moisture from hands sets up conditions for rust, corrosion, etc. Bare metals should be sealed with microcrystalline wax or lacquer to deter moisture and contaminants from attacking surfaces. Rubber items should be protected from direct sunlight and ozone as those agents accelerate the deterioration of the rubber. Applying a preservative treatment (Armor All or equivalent) to rubber items helps with their preservation and protection from light and ozone. **No treatment will be performed on loaned artifacts without approval of NNAM.**

2. As with organic objects, proper environmental control and good housekeeping are essential to preserving inorganic objects.

F. Conservation: Adherence to the guidelines for preservation of objects will go a long way to insure their longevity. In rare instances, some conservation measures may be needed. **Contact NNAM if you have any concerns about loaned items and requirements for conservation.**

G. Handling: All objects shall be handled only while wearing cotton, nylon, or latex (unpowdered) gloves. Two hands should be used to handle or carry objects to reduce risk of dropping. Carry only one object at a time using both hands.

I. Display: Displaying an object can be very detrimental to it if not done properly. Cases should be designed to incorporate UF-3 Plexiglas to shield objects from Ultra Violet light. Cases should be ventilated to allow air exchange but filtered to prevent entry of insects. All interior surfaces of wooden cases should be sealed with shellac. All artifacts should be buffered from acidic display materials. Never alter an artifact to fit a case or to facilitate mounting. Use undersized mannequins to display uniforms. Do not force garments on to mannequins.

Keep cases clean and place them in areas away from direct sunlight and extremes in temperature. Certain items such as original photographs, and paper material such as documents and newspaper, should never be displayed. Only copies of such items should be placed on display owing to the very fragile and vulnerable nature of this material. **Plans/designs proposing the manner in which loaned artifacts will be displayed will be forwarded to NNAM for consideration and approval prior to any artifact being placed on display.**

J. Shipping: Experience has shown major damage to artifacts have occurred during shipping. When shipping artifacts of a small nature by parcel, special care in wrapping and padding should be made. Larger items should be crated either by supporting base transportation officers or by professional moving companies.