Section 1

Organization Charts
Operations and Maintenance
Uniforms
Tour Procedures
Travel Policy and Expense Reimbursement,
Mission Tour Director
Public Tour Procedures
**ELECTED UNIT STAFF**

Staff Officers are elected by the general wing membership for 2 year terms of service. Elections are staggered to ensure experienced staff at all times.
**STAFF APPOINTED POSITIONS**

Elected Staff Officers appoint varies wing members to fill positions for which they are qualified, serving a valuable service to the Wing. Appointed positions are not defined for a specified time period. The appointment lasts as long as needed or as long as the Elected Staff determine it is good for the Wing.
CAF AIRCRAFT OPERATIONAL
CHAIN-of-COMMAND
(CAF Unit Manual)

HQS, CAF

HQS, GCW

GCW OPERATIONS OFFICER

* AIR MISSION COMMANDER

PILOT
IN-COMMAND
(PIC)

All other Assigned Crew Members
SIC, FE, Mission Tour Director, PX Rep,
Loadmasters, Ride-Coordinator, Scanners
Maintenance Colonels
and additional crew members.

* Air Mission Commander will only be designated when the Operations Officer is not physically present and there is more than one PIC present for duty.
GULF COAST WING
B-17 Texas Raiders Operations Chart

WING LEADER
COL Don Price

Operations Officer
COL Pat Elliott

Stinson Ops. Mgr.
COL David Carr

Rides Coordinator
COL Jane Turk

Mission Tour Director
(as assigned)

Tour Planning Director
COL John Alkire

GCW Elected Staff
WING ORGANIZATION, NEWS & MEETINGS

Elected Officers (serving 2-year terms)

Wing Leader: COL Don Price (don_price56@hotmail.com)
Executive Officer: COL Bud Bearce (k5ju@att.net)
Operations Officer: COL Pat Elliott (pelliottsr@hughes.net)
Wing Finance Officer: COL Craig Langnes (craig.langnes@sbcglobal.net)
Safety Officer: COL John Alkire (Jdalkire1@gmail.com)
Maintenance Officer: COL Jed Doggett (Doggett.jack@gmail.com)
Adjutant: COL Rex McClain (breitlingsteeler@hotmail.com)

Appointed Officers (appointed by Wing Staff)

PX Officer: COL Vicki Thomas (vthomas4@comcast.net)
Supply Officer: COL Lee Brown (lebro29@yahoo.com)
Deputy Maintenance Officer: COL “Doc” Hecker (tcflyingdoc@yahoo.com)
Deputy Supply Officer: COL Joe Duncan (rethst@comcast.net)
Recruitment & retention: COL Rick Thomas (rethret@comcast.net)
Morale Officer: COL “Doc” Hecker (tcflyingdoc@yahoo.com)
Web Master: COL Chris Ebdon (ebdon@av8pix.com)
Wing Historian: COL Chris Ebdon (ebdon@av8pix.com)
Public Information Officer: COL Chris Ebdon (ebdon@av8pix.com)
Cadet Coordinator: COL Chris Ebdon (ebdon@av8pix.com)

Wing Staff Meetings are held on the 2nd Saturday of each month in the Wing hangar office. Resolutions, agenda items, suggestions and/or comments regarding Wing matters should be submitted to the wing leader and staff members prior to meeting dates.

GCW General Meetings are held on the same date (2nd Saturday) as the Wing Staff Meetings, and follow the Staff meeting. Locations and dates will be announced monthly (via the Wing newsletter) and are held at the Wing hangar.

The GCW Newsletter, COWL FLAPS, is published monthly by the Col’s. Beverley Brown, Kathleen Hanna & Jeff Brown. Newsletter articles should be forwarded by mail or e-mailed to COL Jeff Brown:
5100 Inverness Drive
B-17 Operational Updates are generated by the Operations Officer mainly through e-mail since this medium is most expeditious. If you have not provided your email address to the Adjutant for the Wing roster, please do so soon.

Wing Dues are renewed annually and due by the end of February to ensure entry into the membership roster. Gulf Coast Wing membership is currently $50, requiring you to be a paid member of the CAF. Persons who are not current in Wing dues and CAF dues will not be able to serve in crew positions on Texas Raiders.

B-17 FLYING OPERATIONS

B-17 Flying Operations are governed by the following Publications:

- CAF Unit Manual
- CAF Finance Guide
- CAFR 60 Chapter 1 *Procedures for Flight Operations*
- CAFR 60 Chapter 2 *Procedures for Flight Evaluation Boards & Aircrew Qualifications*
- CAFR 60 Chapter 3 *Carrying of Passengers for Compensation*
- EXEMPTION to FAR 91; 6802 *Carrying of Passengers for Compensation*

B-17 MAINTENANCE

B-17 maintenance is conducted under the authority and responsibility of the GCW Maintenance Officer. The Applicable CAF Publications are:

- CAFR 66 - 1 *Aircraft Maintenance Policies & Procedures*
- CAF *Required Reports*
- FAR 91 *Maintenance*
- B-17 Maintenance Program (Shared with Sentimental Journey)
FLIGHT SUITS, CREW PATCHES and OTHER CAF/GCW ATTIRE

Crewmember patches are purchased from the GCW PX and are never to be sold or given to non-CAF, non-GCW members. Sanctioned CAF name tags may be ordered from the CAF Headquarters Gift Shop.

Flight Suit:
Reference CAFR 60-1, paragraph 11.
The standard flight suit required for essential flight crew members at all times while performing the duties of a CAF aircraft essential flight crew member on all CAF flights shall be Desert Tan and configured in accordance with guidelines available through the CAF Headquarters Gift Shop (reference the CAF “Members Only” website).

Non-essential crew members may wear the flight suit of their choice. However all flight suits should be “nomex”, or an equivalent fire retardant fabric.

“Essential Flight Crew” are defined as:
☑ Pilot & Co-pilot,
☑ Engineer / Crew Chief
☑ Loadmaster

There are four patches approved for the new Desert Tan flight suits: The American Flag on the left shoulder with the blue star field facing forward, the CAF National Shield on the right shoulder, a name tag with CAF wings over the the left breast and a Unit patch of your choice over the right breast. In the spirit of maintaining a "look of uniformity" no other patches are approved for the back or any other locations on the Desert Tan flight suits. Your first Desert Tan flight suit is being provided by the CAF for essential flight crew members flying CAF aircraft and patches from other organizations, or ANY political patches are not appropriate.

Placement of patches described below are referring to the flight suit.

AMERICAN FLAG:

The American flag shoulder insignia should be worn on the left shoulder (preferred location) with the blue field forward and the strips to the rear. The flags are either sewn on, or attached with Velcro. Approximate size should be 3 1/2” x 2”.

SHOULDER INSIGNIA - SILVER FALCONS:
The shoulder insignia are embroidered silver falcons on a black background. These shall be sewn to the shoulder epaulets. These may be ordered from the Gulf Coast Wing PX.

NAME TAGS:
Name tags are to be worn over the left breast pocket (velcro should be present on the flight suit). Name tags are available in brown leather with gold lettering or black leather with silver lettering. Name tags are available on-line from the CAF Headquarters Gift Shop.
NOTE: Please be sure to enter the name exactly as you wish for it to be spelled on the checkout page of the order form. Name tags are custom ordered, and require 4-6 weeks for delivery. There are several different type of wing configurations available including Regular Member, Life Member Wings and Sponsor Wings.

NATIONAL CAF FLIGHT PATCH:

The national CAF Flight Patch (also referred to as the CAF Shield Patch) should be worn on the right shoulder (or opposite shoulder of the American flag). These are available through the CAF Headquarters Gift Shop.

UNIT/WING PATCHES:
The Wing patches are usually worn on the front of the flight suit. One can be worn on the right breast pocket area (opposite the name tag) and then one can be worn below the name tag. The patches worn are at the individual member’s discretion, but usually the GCW “Triangle L” patch is worn opposite the name tag. Other patches may be worn on the flight suit at the individuals discretion, appropriate to the CAF/GCW mission and should be in good taste. These may be ordered from the Gulf Coast Wing PX. Examples are:

INSIGNIA ON BACK OF FLIGHT SUIT:
Patches on the back of the flight suit are not encouraged (discretionary), but if worn should be appropriate to the CAF/GCW mission and in good taste.

All CAF patches should say Commemorative Air Force (not Confederate Air Force).
Flight suits are available from a number of sources including surplus stores and on-line surplus and aviation suppliers. E-bay will also have a listing for the flight suits.

OTHER GULF COAST WING ATTIRE:

When not in flight suits, but involved in a Gulf Coast Wing, or CAF activities the following are considered appropriate attire.

1. GCW “B-17 Flight Crew” red polo shirt with CAF and Texas Raiders logos. These are available from the GCW PX. These shirts usually have the individuals name embroidered on them (by the individual). These shirts are worn with black slacks (or shorts during the summer).
Embroidery source: EmbroidMe, 18508 Kuykendahl RD., Spring, TX. 77379 (this is the S/E corner of Kuykendahl and Louetta, just south of the Kroger store). Phone 281-651-1980; website http://www.embroidme-springtx.com

2. CAF uniform shirts, navy blue; short or long sleeve. These are ordered through the CAF Headquarters Gift Shop and can be ordered with your name and GCW embroidered on them. The navy blue shirts are worn with khaki slacks.

3. There are several polo type shirts with the CAF logo on them available from the CAF Headquarters Gift Shop.

4. Covers:
   A. Ball caps (appropriate to the CAF/GCW mission)
   B. WW II style “crush caps”

Uniforms do not have rigid requirements, but should be worn as generally described above and in such a manner that presents a professional and consistent image to the public.
B-17 TOUR OPERATIONAL PROCEDURES
And
CREW ASSIGNMENTS

A. DEFINITIONS
1. **ACTIVE MEMBER**: Must be a member in good standing in the CAF and Gulf Coast Wing. Must attend GCW wing and crew meetings on a regular basis and must be an active participant in either maintenance, PX, Finance, flight operations, fundraising or supply or serve as an elected GCW staff member.
2. **INACTIVE MEMBER**: Member in good standing who does not meet the above criteria.
3. **SPONSOR**: TEXAS RAIDERS (TR) Sponsor as noted below:
   - Full Flying Sponsor: $3500
   - Restoration Sponsor: $1750
   - Supporting Sponsor: $ 350
4. **ESSENTIAL CREW**: Pilots, Flight Engineers, Loadmaster and any other persons (this could include news media, “payback” rides to individuals or companies who have made significant contributions to TR) required to accomplish the mission. This includes also, 3 or 4 seats for “Maintenance Colonels” on missions away from base and 1 seat for PX, if the PX is transported on board for the assigned mission. If revenue rides are planned on the mission, 1 seat will be designated for a Rides Coordinator.

B. CREW ASSIGNMENT PRIORITIES
1. Essential Crew
2. Active Full Flying Sponsors
3. Active Members
4. Inactive Full Flying Sponsors
5. Inactive Members
6. Other CAF Members
7. Non Members

Note: Full Flying Sponsors are given assignment priority within each category (active or inactive status) as per the CAF Unit Manual issued by Headquarters, CAF.

C. ASSIGNMENT RULES
The operational objective of tour assignments will be to fairly rotate as many active B-17 crew members into the flying tour schedule as possible.
1. Once a crew member flies an operational mission, their recent trip will be taken into account before being assigned to a subsequent mission ahead of an active member who has yet to fly.
2. Normally, crew assignments for preplanned missions are “set” no later than 30-days prior to the mission. Longer duration missions (1 week or longer) will require the crew assignments to be set further in advance.
3. Exceptions to the above policy (30-day rule) may be made by the B-17 Operations Officer in extenuating circumstances.
4. Pilots and Flight Engineer assignments are scheduled through the B-17
5. “Maintenance Colonels” (3 or 4) for away-from-base missions will be scheduled by the B-17 Maintenance Officer.

6. When PX is carried/transported on the away-from-base mission, the PX crewmember will be scheduled by the PX Officer.

7. All other crew member assignments including the Rides Coordinator are scheduled through the B-17 Mission Tour Director.

8. On short-notice, unscheduled missions, all crew assignments will be made by the B-17 Operations Officer or Air Mission Commander.

9. The annual “AIRSHO” at Midland and WOH Air-show crew assignments will be scheduled through the B-17 Operations Officer. Flight-time contributions during the season will be considered in these assignments.

D. REPORTING FOR MISSION

1. The mission report time will be a minimum one-hour prior to take off. The B-17 Operations Officer will distribute an operational update via email prior to the mission, listing crew members, destination and tour objectives.

2. All crew members must be present and in Nomex, for flight briefing. The Mission Tour Director should ensure that all essential supplies, PX and Tour/Revenue Rides supplies are on board the aircraft.

3. Essential crew members must prepare the aircraft for loading and pre-flight.

4. The Mission Aircraft Commander should brief all crew members of the arrival schedule prior to boarding the aircraft.

E. FLIGHT ARRIVAL

1. Upon arrival, each crew member should be prepared for attending to the parking, chocking and aircraft set-up. If the mission schedule permits, the aircraft should be wiped-down of excess oil upon engine shut-down and parking.

2. Crew members should be prepared (according to mission brief) to unload supplies, set-up tour pylons, or assist in the revenue-ride process.

F. TOUR SCHEDULE RESPONSIBILITIES

1. The Mission Tour Director should advise crew members each evening of the following day’s schedule (ie. Air-show-flying, revenue rides, A/C tour-schedule, breaks & lunch times, etc.

2. All crew members must report for transportation to/from the airport at assigned/briefed time each day. Crew members who fail to arrive on time for such transportation will be responsible to find other transportation on their own, or at their own expense.

3. The B-17 Operations Officer maintains the right to refuse crew assignment on future tours to any crew member who fails to share in work-assignments, or presents themselves in a disorderly, inebriated or rude fashion in public view, or is unsafe, verbally abusive to fellow crew members and/or the public, or uses profanity in a public environment.

G. FLIGHT RETURN TO TOMBALL JET CENTER (SPRING, TX)
1. Prior to departure from the mission base, a designated crew member should contact the B-17 Maintenance Officer, Executive Officer or other designated wing member to advise of flight-time arrival.

2. Upon arrival, all crew members should assist in unloading the aircraft and wiping down the aircraft.

3. The aircraft should be chocked and locked before leaving the arrival ramp or placed/towed into the hangar.

4. The Mission Tour Director will be responsible for the completion of the Tour Report. The PX Officer (or PX-Designee) is responsible for the completion of the PX Report with the Mission Tour Director’s verification of said report. The Mission Tour Director will ensure that all monies have been counted, witnessed and secured.

5. Revenue Ride monies (as well as PX monies) must be deposited locally in the Wing Account Bank or converted to a cashier’s check, money-order or similar financial instrument for mailing to the GCW Finance Officer.
GULF COAST WING B-17 TRAVEL POLICY

SCOPE: The intent of this policy is to detail the travel expenses directly related to the operation of the B-17 TEXAS RAIDERS (TR). It has been reviewed and approved by the Wing Staff and thereby included in this manual for your information and referral.

GENERAL: When traveling on tour with “TR”, Lodging (double occupancy) and Local Transportation will normally be provided. Any other expenses are the responsibility of the individual Crewmember. It is our intent to negotiate as many complementary lodging and transportation arrangements into our signed agreements, as possible.

EXCEPTION: On occasion, a “TR” mission will be posted for assignment which requires crewmembers to pay a certain amount or portion of lodging and/or transportation expenses. This will be noted when the mission is posted for assignment “bid”.

COMMERCIAL TRAVEL: All travel to-from “TR” on tour will be the responsibility of the crewmember concerned, unless other arrangements have been authorized in advance by the Bomber Operations Officer.

SPECIAL SHOWS: The Annual CAF HQS Show in Midland and the “Wings Over Houston” show are both considered “All Hands” events. No expenses or reimbursements for crewmembers will be paid at these events.

ADVANCE PLANNING: When it becomes necessary for a crew member to join the tour at a specific tour-stop, and at the request of the Bomber Operations Officer, as much advance notice will be given to allow the best opportunity to purchase airline tickets at a discount. In some cases, space-available airline passes or “buddy-passes” may be advantageous to keep costs at a minimum. Please contact the Bomber Operations Officer to canvas the membership regarding this opportunity, as several of our members are either active or retired airline employees.

RECEIPTS and ACCOUNTABILITY All requests for reimbursement for approved expenses must be submitted within 30 days of the event, with receipts (original copy). No receipts – No reimbursement.
CHECK / REIMBURSEMENT REQUEST FORM

Make check payable to:

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TOTAL

SUBMIT TO:

CAF Gulf Coast Wing
28306 Parkerton Lane  Spring, TX  77386
Phone: 832-928-7817  Fax:
Craig.langnes@sbcglobal.net
MISSION TOUR DIRECTOR RESPONSIBILITIES

To qualify for assignment as a Mission Tour Director, the candidate must be a seasoned CAF and Wing member in good standing, have successfully completed the B-17 Ground School, have a working knowledge of the Tour and Revenue Rides process and be familiar with the CAF organizational structure and mission. The Mission Tour Director will be assigned by the B-17 Operations Officer prior to each mission and will have the following responsibilities:

**Primary Responsibilities**
- FBO and Event Coordinator contact for aircraft parking and facilities.
- Secures and distributes event tickets/armbands or lanyard-IDs to crew.
- Conducts daily pre and post activity briefing with crew.
- Coordinate with PIC, PX and Revenue Rides Coordinator regarding the timetable planned for the event or air show.
- Serves as the representative for ground transportation, lodging arrangements and payment coordinator.
- Oversees tour set-up, traffic-cone and line placement as per B-17 Ops procedure and event coordinator requirements.
- Liaison for banking and post-office functions.
- Liaison for other supply purchases.
- Responsible for money management documents and payments.
- Ensures accuracy and completion of PX Financial Report and Tours & Rides Reports.
- Collects appearance fees and other financial commitment fees.
- Serves as liaison to air show coordinator for special arrangement flights.
- Appoints and oversees tour reporting crew and money count/witness.

**Secondary Responsibilities**
- Assist ground crew personnel as needed.
- Ensures safe crew rotation and meal breaks arrangements.
- Is responsible for securing water supply for crew members.
- Arrange additional help/support (manpower) for ground crew as needed.
- Recognize CAF new membership opportunities and assist in recruiting.

**During Irregular Operations**
If, during the tour, irregularities (such as airport closures, diversions to alternate airports, and loss of crew member due to illness) occur, the Mission Tour Director should contact the B-17 Operations Officer regarding deviations and alternate plans for the mission.
PUBLIC TOUR PROCEDURES

A. GENERAL
To provide a safe and secure aircraft touring environment, the GCW requires that traffic cones/pylons be roped around the aircraft before permitting public tours.

1. Exterior Preparation
   Rope off aircraft with entry at nose
   Ladder in place at nose hatch
   Bomb bay doors open
   WWII music on (Optional)
   Donations-Bomb and Info-Sandwich Board at entry (Optional)
   Handouts ready at front entry
   Seed-money received from Mission Tour Director
   Exit signs over aft exit door
   Warning flags on lower radio wire antenna
   Tour price signs up (Optional)
   Remove pitot and top turret covers

2. Interior Preparation
   Remove Norden Bomb Sight cover
   Rope off pilots seats, install signs
   Secure all loose cargo and equipment
   Police the plane; remove all garbage off aircraft

3. Crew Rotation & Tour Money Disposition
   Relieve crew (out of hot sun) at a maximum, every 2-hours
   Stay hydrated; drink plenty of water and Gatorade
   Return tour seed money to Mission Tour Director
   Deposit $100 increments into TOURS pouch (found in TOUR Briefcase located near PX table)
PX Table normally set-up under right wing, accessible to both interior as well as exterior patrons.

SAFETY is critical in tour procedures. No Smoking will ever be permitted around the aircraft at any time! Place a step at the rear/exit of the aircraft and if manpower permits, rotate a crew member at the back door to ensure safe exits. Always position a crew member at the entry-ladder area of the aircraft.

PROFESSIONAL IMAGE will help the public understand our mission. The mission Tour Director will advise the uniform for the tour. This image will assist the public in seeking the appropriate member(s) for answering questions, joining the organization or making a donation.

GATE ENTRANCE is positioned at the forward nose-area of the aircraft. Rotation of crew members is critical to ensure that no one member becomes over-heated, dehydrated or tired. This position requires collection of money, and distributing informational folders to the public. You will start the tour with “seed” money (usually $50) and when collection of monies exceeds $100, see that this money is deposited into the TOUR money pouch, found in the TOUR BRIEFCASE.
Section 2

Safety
Safety In and Around “Texas Raiders”

Safety Around The Hanger

Watch your head - There are lots of places where you can hit your head when you are walking under or inside the plane. We have padded some things like the exhaust pipes, but there are still plenty of hazards.

Ladders – Ladders should always be stabilized by someone holding them while another person is on the ladder. Ladders that are used on top of work platforms must be tied off to the platform securely to stabilize the ladder.

Look out for dropped objects/tools when people are on maintenance ladders, platforms, or on the wing.

Personnel Lifting - Many maintenance operations around the hanger involve lifting heavy things. You must be sure that you are lifting correctly – always using your legs, not your back. Be especially careful with aircraft tow bars because these are heavy and awkward to lift. Be aware of pinch points when installing tow bars on aircraft or tug.

When using cranes/hoists - Many heavy pieces of equipment on TR, like engines, require the use of cranes. The maintenance head on-site for the lift should always review a lifting plan with the lifting crew to make sure everybody knows what is going to happen and what their role in the lift is.

Always think about what could happen if the crane or lifting cable/strap failed. Never allow yourself to get under a load while it is in the air. Always stay far enough away to be safe if lifting equipment should fail.

Heavy pieces of equipment like engines should always be stabilized using a tag line, a rope tied to the load and held by someone on the ground, to keep the load from twisting.

Wet hanger floor - The concrete floor in Tomball Jet Center can become very slippery when wet. Even a heavy dew will make the floor slick. Be careful when walking on wet floors.

Oil Spills/Leaks - TR engines routinely leak oil. Oil can also be spilled during some maintenance operations. Promptly clean up all oil leaks or spills to prevent someone from slipping. Spill kits and kitty litter are located by the water cooler in the hanger.

Oily rag/paper towel disposal - Oily rags and paper towels present a potential fire hazard if simply put into ordinary trash cans. Please use the red oily rag waste cans located around the hanger.

Personal Protective Equipment (PPE) - PPE is there to protect you during certain kinds of activities in the hanger. The following types of PPE are provided in the hanger for your use:

- **Safety Glasses** (various locations in the work room and hanger) – These are needed to protect your eyes from damage by objects. Always use safety glasses when grinding or drilling. Use them during any other type of activity that could potentially damage your eyes, for example, using a cold chisel and hammer.

- **Face Shields** (located in the work room) - These will protect your face from objects. They are typically used during grinding when hot sparks may be directed at your face. NOTE: face shields should always be used in conjunction with safety glasses, not as a replacement for safety glasses because particles can get to your eyes through open areas of face shields.

- **Goggles** (located near the parts washer) - They can be used in place of safety glasses. They should also be used when there is a hazard from splashing liquids. Typical operations around the hanger where goggles should be is when using the parts washer.
• **Chemical Gloves** (located near the parts washer) – These should be used to protect your hands from liquids and solvents. They should be worn when using the parts washer or handling other potentially hazardous materials like paint strippers.

**Respirators and Dust Masks** (located in the white cabinet near the water cooler) - These should be used to protect your lungs from particulates or harmful chemicals. Paper dust masks should be used during sanding or any other activity that generates dust or small particles. Dusk masks should be used when operating the glass bead blaster to prevent ingesting dust from the glass beads. Respirators should be used to protect you from breathing harmful chemicals or solvents. Always wear a respirator when painting.

**Off-Limits**
TR is off-limits (STERILE in aircraft speak) during the following operations:

- Fueling
- Fuel transfer
- Any maintenance operation involving open fuel tanks, like changing fuel boost pumps
- When on jacks

“Off-limits” means only essential crew directly involved with the aircraft are allowed in, on, or near the plane. This means that no public (or private) tours are allowed. No rev ride passengers aboard, no non-essential crew aboard.

TR should be cordoned off using the cones and pylons when off-limits. Maintenance other than the above listed operations may require that specific areas of the airplane are cordoned off – for example when oiling, the immediate area should be secured because of the potential for oil spillage onto crew of the public.

**Tour Safety**

**Static tours** - When TR is on tour, one of the ways we raise money is by selling tours to the public (static tours). There are several safety issues involved in static tours that must be managed.

The aircraft should be cordoned off using cones and rope to limit public access to the aircraft to the front gate. The public should enter the plane through the front hatch – which requires a ladder. The ladder should be manned **at all times** to ensure it does not tip and to assist tourists that need help getting up the ladder. Tourists should be reminded to use the yellow grab bars located in the plane and to hold onto the ropes going through the bomb bay. This is especially important for small children crossing the bomb bay catwalk.

The nose area must be cordoned off using bungee cords to prevent tourists from entering the nose.

There **MUST** be a crew member stationed in the cockpit to prevent tourists from tampering with instruments, switches, controls, etc.

There should be a crew member stationed in the radio room or waist to assist tourists as they transit the aircraft, especially around the ball turret.

There should be a crew member at the rear door to assist tourists exiting the aircraft. Again, this is especially important for small children and tourists that are not very mobile.

**TR on display to the public** – At many air shows, the public can freely roam around TR because it is not cordoned off. This presents its own set of safety issues:

- Engine oil – the engines leak oil so the public should be encouraged to not stand directly under engines or engine cowlings and avoid oil puddles on the ground. Keep oil puddles...
to a minimum by wiping them up periodically. Some fuel depots have hydrocarbon absorbing mats that can be placed under the engines.

- Hot surfaces – if TR has recovered from a flight, the engines will be hot. Keep the public away from the engines, and brakes until things cool off. Keep them away from Props until 30 minutes after shutdown as discussed later.
- Maintenance – many times, we will have to perform maintenance on TR during a period when it is not cordoned off. People are naturally curious about a bunch of folks in green suits crawling all over an engine. Make sure that the area is cordoned off if there is anything about the maintenance operation (like oiling or dropped tools) that could pose a hazard to the public.
- Smoking – smoking is widely prohibited on ramps, however, don’t assume that everyone will take heed. Be aware for someone smoking around TR and ask them to stop or move away. No smoking is allowed inside TR as well.
- Head Injuries – as already mentioned, there are a lot of places to hit your head. Encourage the public to be careful when around the aircraft because of the threat of hitting their heads.
- Control surfaces – control surfaces (ailerons and elevators) are fabric covered. Do not let anybody touch control surfaces.
- Props – the public should not be allowed to lean on or push props.

Often times a crew member will bring a support vehicle to the aircraft to assist in handling luggage, parts, etc. Be aware not only of the public when moving a vehicle near TR, but do not allow the vehicle to touch any part of the aircraft.

**Safety In The Air**

When you are flying on TR, make sure you are belted in on take-off and landing. Always keep yourself steadied as you move around the aircraft. Hold onto only solidly mounted equipment, yellow grab bars, or the overhead conduit in the waist. Never ever touch the control cables while in flight. Do not stick your head out of waist windows. Do not crawl into the tail gun position on take-off or landing. Only move to the tail gun position if cleared to do so by the PIC.

Emergency exits on TR are shown below:
The front hatch and rear door have safety nets that should be covering them in flight. The netting is easily unlatched with one hand.

If you are a Loadmaster or Scanner on an air show flight, be constantly looking for air traffic and warn the PIC if something looks too close. When traveling on TR in general, inform the PIC if “sightseers” in their personal aircraft approach TR.

Essential crew (PIC, SIC, FE, LM) must wear sage tan Nomex flight suits when in flight. This should include Nomex gloves as well. Remaining crew members are encouraged to wear Nomex when flying.

When flying aboard the B-17 wear ear plugs or headset.

Watch for fuel or oil leaks on or under the wings and inform the PIC of them immediately.

**Revenue Ride Safety**

The safety of passengers on revenue rides is paramount. The Loadmaster is responsible for passenger safety. Loadmasters will brief the public before they board the aircraft. Specific briefing and safety issues for revenue rides are covered in Loadmaster training.

**Props**

Props are “dressed” after a flight by pulling the prop so that one blade is vertical pointing down. Props should not be dressed within 30 minutes of engine shutdown to eliminate the risk of a
“kick” due to detonation of residual fuel in a hot engine. Also, do not walk between the props or between the props and fuselage within 30 minutes of shutdown.
Props are not back rests – don’t use them as such.
When pulling props prior to engine start, use both hands and pull or push the blades slowly while feeling for a hydraulically locked cylinder. Only one person should be on a blade to minimize the risk of damaging the engine if there is a hydraulic lock.

**Installing or Pulling Chocks**
You may have to insert the chocks under the main wheels after landing if there is not ground crew support at your destination. The aircraft will taxi to its parking spot on the ramp as directed by marshalers. The PIC will continue to run engines after stopping for a couple of minutes. DO NOT exit the aircraft until after the engines are cut off. Grab the chocks and approach the wheels from the rear. DO NOT chock until props are stopped and it is safe. You do want to hurry as much as you safely can because brakes are hot and need to be released as soon as the wheels are chocked. After inserting the chocks, walk around the wing – never near or through a prop arc, and signal the PIC or SIC that chocks are installed. You may have to get their attention with your whistle. The chock installed signal is:

![Chocks Inserted](image)

You may have to remove chocks before a flight if there is no ground support. Our policy is to remove chocks BEFORE engine start if at all possible. Position yourself in front and on the right side of the aircraft so that you are in full view of the SIC. The SIC will give you the signal to pull chocks after the parking brake is set:

![Chocks Removed](image)

Note that sometimes it is necessary to pull chocks with the engines running because they are stuck under the tire. This can happen when the chocks are set tight to the tire and the plane is fueled. The increase in weight causes the tire to flex and trap the chock. Always leave a couple of inches between the chocks and the tire so that they don’t get stuck because of fueling. Sometimes, the rear chock will be stuck because the plane has rolled backwards slightly on an inclined ramp.
Make every attempt to pull the chocks lose. Pulling, kicking, screaming, and cussing are all suitable approaches – each with various degrees of effectiveness. The front chock must be pulled somehow no matter what. If the rear chock is stuck, and the front one is removed, the engine can be started and the aircraft pull away from the chock so it can be removed. A better way is to put the front chock to the side of the wheel. Then engines can be started and the plane taxi away from the chock. You can then recover it when the plane is a safe distance away and you are not near a turning prop.
**Flight Line Safety**
The “Flight Line” refers to where TR, and possibly other aircraft are parked. If you are on the ramp with other aircraft, especially at air shows, pay attention to taxiing aircraft and stay clear. Some crew members are on the flight line when TR is “hot” - during engine start, taxiing, and aircraft recovery from a flight. There should only be 4 (maximum) crew members on the flight line when TR is hot: 1 fireguard, 1 crew member signaling prop rotation and fuel condition on start-up, and 2 crew pulling chocks. These crew members should wear fluorescent lime green safety vests (sherbies). If you are not wearing a sherbie, you do not belong on the flight line.

**Fire Safety and Fire Extinguishers**
Fires are one of the greatest threats to TR. It is important that every crew member understand fires, fire extinguishers, and how to attack an airplane fire should one occur. The following material will provide you with basic information about fires and their control. It is NOT a comprehensive guide to all fire situations. Common sense and good judgment must still be practiced.

**Common sense and good judgment must still be practiced.**

**Fire Basics**
Elements of a fire: Fire is the result of a chemical chain reaction. There are three basic elements needed to obtain fire. These three elements are:

- **OXYGEN**
  - Any substance that will burn
  - Solids (coal, wood, paper, cloth, etc.)
  - Liquids (kerosene, mineral spirits, gasoline etc.)

- **FUEL**
  - Fuel needs a heat/ignition source to raise its temperature to, or above, ignition point (spark, match, lit cigarette, friction etc).

- **HEAT**

The elimination of any one of these three elements will stop the chemical chain reaction and the fire will cease. That is what fire extinguishers are designed to do.

**Classifications**
There are four basic classifications of fires:
CLASS A - Ordinary combustibles: Coal, wood, paper etc.
CLASS B - Flammable liquids: Gasoline, kerosene, grease, etc.
CLASS C - Electrical: Electrical wiring, electric apparatus, motors, etc.
CLASS D - Flammable metals: Magnesium, titanium, zinc, aircraft aluminum

**Types of Fire Extinguishers**
To control or eliminate a fire, specific classes of fire extinguishers have been engineered to eliminate one or more of the three basic fire elements.

**CLASS “A” - Water**
These extinguishers contain water and compressed gas, and should only be used on Class A (ordinary combustibles) fires. Do not use this type on electrical fires! A shock hazard exists. TR does not carry any of these extinguishers.
CLASS “BC” – Carbon Dioxide (CO₂)

CO₂ extinguishers are most effective on Class B and C (liquids and electrical) fires. Since the gas disperses quickly, these extinguishers are only effective from 3 to 8 feet. Since the fire could re-ignite at hot spots after the CO₂ dissipated, be prepared to continue to apply the agent even after the fire appears to be out. Be careful -- CO₂ extinguisher components become very cold and can cause freezing damage to skin! Be careful using CO₂ extinguishers in confined spaces like, for example, the Radio Room because the CO₂ will displace oxygen presenting a hazard to your breathing.

Most of the fire extinguishers on TR are CO₂. Locations are shown below.

CLASS “ABC” –

Dry Chemical extinguishers are usually rated for multiple purpose use. They contain an extinguishing agent (powder) and use a compressed, non flammable gas as a propellant. TR carries one 25lb dry chemical exchanger located at the rear of the waist area.

Halon extinguishers contain a gas that interrupts the chemical reaction that takes place when fuels burn. These types of extinguishers are often used to protect valuable electrical equipment since they leave no residue to clean up. Halon extinguishers have a limited range, usually 4 to 6 feet. There is one 5lb Halon extinguisher on TR in the radio room. Similarly to CO₂, Halon will displace oxygen so it should be used carefully in confined spaces.

CLASS “D” – Specialized for flammable metals. The only flammable metals on TR are the Magnesium wheels. However, we have no specialized metal extinguishers.
Using Fire Extinguishers
Even though fire extinguishers come in a number of shapes and sizes they all operate in a similar manner. Always use the appropriate class of fire extinguisher on the fire.
An easy acronym to remember the steps in using a fire extinguisher is..... **P.A.S.S**
**P**ull the Pin at the top of the extinguisher. The pin releases a locking mechanism and will allow you to discharge the extinguisher.
**A**im at the base of the fire, not the flames. This is important in order to put out the fire, you must extinguish the fuel.
**S**queeze the lever slowly. This will release the extinguishing agent in the extinguisher. If the handle is released, the discharge will stop.
**S**weep from side to side. Using a sweeping motion, move the fire extinguisher back and forth until the fire is completely out.
Operate the extinguisher from a safe distance, several feet away, and then move towards the fire once it starts to diminish. Be sure to read the instructions on your fire extinguisher - different fire extinguishers recommend operating them from different distances.
**Note: IF YOUR CLOTHING IS ON FIRE** (and the ground/floor is not) STOP, DROP and ROLL on the ground to extinguish the flames. If you are within a few feet of a safety shower or fire blanket, you can use these as well. If one of your coworkers catches fire and runs in panic, tackle them and extinguish their clothing using the appropriate fire extinguisher.
Disclaimer: These pages contain guidelines for the use of fire extinguishers and are not meant to be a comprehensive reference. There are many circumstances that these guidelines cannot foresee and you should recognize the inherent danger in relying solely on this information.

Information Specific to Aircraft Fires
Immediately notify PIC/SIC of a fire. The pilot will try to put out an engine fire by shutting off the fuel and can operate an extinguisher located inside the engine cowlings.
**Engine Fire** - If there is an engine fire, approach from behind the engine. Do not try to extinguish the fire until the engine and prop have stopped turning.
**Brake fire** – Always approach the wheel from the fore or aft. Use dry chemical if possible. If there is smoke coming from the brakes, they may be just hot or there might be a fire. Feel near the rim to see if hot. Call crash crews for fans to cool the brakes in needed.
If a Magnesium rim is on fire, use foam if available. If not, dry powder. **DO NOT USE WATER!**
**Fuel Tank Fire** - Immediately call airport fire support because we probably don’t have enough on-board extinguishers to fight anything but a small fire.
**Wiring/interior fire** - Use CO₂ or Halon only because dry chemical can be corrosive to aluminum aircraft structures and parts.
**Life Vests**
Life vests are located at various places in the aircraft. They are commercial aircraft life vests. Locations are shown below:

![Location of Life Vests on TR](image)

**Passengers’ Safety, Illness or Injury**
Always pay attention to the safety and care of our crew and passengers and be on the lookout for any unexpected sickness, or injury. Notify flight deck of any sickness, illness or injury immediately.

A first aid kit is located in the Radio Room in the left (port side) structure surrounding the RR hatch.

Air Sickness is the most common problem in flight. Air sickness bags are in the radio room in a green bag, but many Loadmasters carry 1 gallon zip lock bags for airsickness because you may not have time to get to the radio room.

Be very aware of heat exhaustion for both passengers and crew.

If a person is injured, stabilize the person and administer basic first aid, unless there is an emergency like an aircraft fire. If possible, wait for EMT’s to do their job.

You can try to stop bleeding using compression, but remember the universal precautions when working with injured or bleeding personnel. **Wear gloves. No skin to skin contact.**
Section 3

The PX
POURSE
The purpose of the Gulf Coast Wing PX is to raise funds for the wing. The selling of merchandise through the PX also promotes the mission of the CAF via materials and goods imprinted with our logos and vintage aircraft symbols. Having a presence at public events affords the wing the opportunity to reach out to the community and further the message of preserving aviation history.

SCOPE
The PX carries a variety of merchandise and strives to reach a wide range of the population --- from toddlers to WWII-era folks! Some of the products offered in the GCW PX are caps, apparel for men, women and children, pins, patches, posters, prints, toys, model kits, etc. Our inventory is ever-changing and new ideas are always welcome.

SET-UP
The following items should be packed when the PX is traveling to events:
- Tent & tent weights
- Tables & chairs
- PX Briefcase (cash box) with seed money
- Credit Card Reader
  This reader attaches to a Smartphone and allows us to process credit card purchases. (See further information later in this section.)
- Plastic tubs with merchandise for sale
  Each item will be marked with a price sticker
- Bins are marked on the end as to what is in that particular bin. Like items are grouped together in a bin to allow for ease of set-up and break-down.
- One “logistics’ bin containing items such as paper, pens, tape, calculator, scissors, table cloths, bungee cords, banners, etc.

The PX is set up either under the wing of the airplane or under the tent(s) in an area designated by the event host. If under the wing, it is preferable to set up on the same side as the rear exit door. This is a better traffic pattern to make contact with people as they exit the plane after their tour.

PX BRIEFCASE
The contents of the PX Briefcase include the following:
- Seed cash
- PX Report forms
A copy of this PX section of the B-17 Operations Manual

4. Membership Applications

This briefcase should NEVER be out of sight for any period of time.

CREDIT CARDS

The GCW PX uses Chase Paymentech Card Readers (SEE NOTE) to process credit cards. This device attaches to a Smartphone and allows us to swipe the customer’s credit card in the field and get authorization and confirmation of the transaction on the spot. The funds are automatically credited to our bank account immediately (no need to "batch out").

Before you can use a Card Reader, you must have a User Name and Password. Contact the Finance Officer, Col Craig Langnes, to set this up for you.

You must download the Chase Mobil Checkout application from the App Store or Google Play on your Smartphone.

1. Launch the application
2. Enter your User Name and Password
3. Plug the Card Reader into your Smartphone, turn your volume up all the way, and make sure the application is open to the entry screen. Listen for the Card Reader to snap into place.
4. Press "Sale" (or "Refund"). Enter the amount of the purchase (or refund). Press "Continue". Your Card Reader will then light up and be ready to use.
5. On the "Enter Card" screen, swipe the card (strip down and towards the back of the Reader). Expiration Date and Security Code will automatically populate.
6. In the "Reference" section, enter either PX, tours, donation, etc.
7. You can also enter the credit card information manually. Follow the prompts.
8. Once the transaction is approved, the signature screen will come up. Have customer sign (with the stylus which is kept in the cash box).
9. If the customer desires a receipt, enter either their email address or cell phone number on the next screen. Chase Paymentech will automatically email or text the receipt to them. You will also receive an email of each receipt.
10. At the top of the home screen, the total number of transactions for that day, as well as the total amount of credit card charges, will be displayed. You will use this when preparing your PX Report for the mission.
11. The Help Desk Number is 866-428-4967 should you need assistance. Inside the Card Reader box, you will find a small piece of paper which contains all the information you will need to give the representative at the Help Desk.
12. You will need to charge the Reader each night before using the next day.
A purchase of **at least $15.00** is required to process a credit card transaction.

**NOTE:** The Card Readers are currently not working; you can still use the Chase app to take credit cards manually; the readers may be used again at a future date. See the PX Officer for more details.

**MONEY**

A. There will be a Team Leader assigned to each PX. **Team Leaders ONLY will handle the cash and credit card transactions for the PX.** No one else should handle the money! The Team Leader should place any large bills under the tray in the cash box. At Wings Over Houston Air show, the PX Officer will come by periodically during the day to collect any large bills.

B. The PX Briefcase is sent out for each tour with $200.00 seed money (more for large air shows such as Wings Over Houston or extended tours).

C. At the end of each tour stop, the cash is counted, leaving the same amount of seed money in the briefcase for the next stop on the tour.

D. The PX Report form is completed and, if possible, sent to the Finance Officer along with a cashier’s check for the amount of cash from that tour stop. If it is not practical to get a cashier’s check at that time, the cash may be kept in the briefcase until it is possible to get the check. Or, in the case of only one tour stop, it is acceptable to keep the cash in the briefcase until returning home, at which time a cashier’s check and the PX Report will be mailed (or delivered) to the Finance Officer. Be sure to include credit card tickets and any receipts for purchases with the PX Report.

E. There are NEVER to be any purchases made with PX money unless authorized by the PX Officer.

**HANDLING THE MERCHANDISE**

Crew Members must remember that all of the merchandise carried in the PX has been paid for and, therefore, should be treated as cash in hand. The PX is packed in plastic bins to protect it from the elements. Be sure the merchandise is protected at all times.

The PX merchandise should be unpacked carefully and displayed in an attractive manner, whether situated under the wing of the plane or in another area. The display always looks more appealing if table cloths are used. Always position the toys separately from the t-shirts. DO NOT display plastic toys in the direct sunlight. If you have gliders or inflatables, display one that has been assembled. It is a good idea to display only a few of each t-shirt on the tables. Keep the rest in a bin in a convenient place under the tent. Hang a
sample of each shirt at the back of the tent, using bungee cords and clothes pins. Hang them so that the graphics are showing. Be sure to hang the GCW banner somewhere in the area where it can easily be seen, preferably on the front of the tables.

At the end of the show, or at the end of the day, merchandise must be carefully and neatly packed into the bins. Remember, you will be displaying this merchandise again! Items should be placed back in the original bin in which it was packed. Like items are grouped together in a bin to allow for ease of set-up and break-down. It is permissibly to merge some bins, if necessary, for ease of transport.

ORDERING MERCHANDISE

It is the responsibility of the PX Officer to purchase merchandise to be sold in the PX. The PX Officer will also work with CAF-HQ on ordering items when appropriate.

The following approvals are required when ordering PX merchandise:

- $500.00 or less - approval of the PX Officer
- More than $500.00, but less than $2,500.00 - approval of the Wing Leader OR the Finance Officer
- $2,500.00 or more - Approval of the Wing Staff

Upon receipt of each order, the PX Officer verifies all items have been received and approves the invoice for payment. The invoice is then forwarded to the Finance Officer to be paid.

Each item is marked with a price sticker… standard mark-up is 100% on most items; however some are 200%-300%. Any deviation from the set price of an item must be approved by the PX Officer.

INVENTORY

Inventory of the PX merchandise is conducted at year-end. This is a requirement of CAF-HQ.

Once the year-end inventory is completed, a copy of the inventory report should be forwarded to the Finance Officer and the Treasurer at CAF-HQ.

An audit by the CAF HQ staff will be conducted each year following year-end inventory.

MISCELLANEOUS

A. Each Wing Member is allowed to have ONE (1) family member assist with the PX at Wings Over Houston Air show. This person MUST be at least FIFTEEN years of age. Cadets under the age of 15 years old are allowed to work the PX.
B. You are expected to work the entire shift for which you volunteered. In the past, we have had volunteers who left their assigned positions, resulting in the PX being short-staffed. If you must leave your post for a few minutes, please make sure the PX is properly staffed. If this problem persists, the offending volunteer(s) will be excluded from working the PX in the future.

C. The Team Leaders will be responsible for making sure the PX stays fully staffed throughout the day.

D. **Consumption of ALCOHOL is not allowed while working the PX.** The offending volunteer(s) will be excluded from working the PX in the future.

E. **You MUST engage the customers! Ask them if they are enjoying the show, if they have toured TR yet, etc. Point out some of the merchandise available. Visit with the kids; demonstrate the toys. Never let a customer ‘just stand there’ – ALWAYS interact with them. You will find that when you engage them, they are much more apt to make a purchase!**
GCW PX REPORT

TOUR: Anytown Air Show
LOCATION: Anytown USA
ARRIVAL: 6/7/2013
DEPARTURE: 6/8/2013

INCOME: PX SALES

Before counting PX cash, remove Seed Money (usually $200.00) and place in the cash box for the next day.

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>$ AMOUNT</th>
<th>DAY 2</th>
<th>$ AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH</td>
<td>210.00</td>
<td>CASH</td>
<td>392.00</td>
</tr>
<tr>
<td>CHECKS</td>
<td>270.00</td>
<td>CHECKS</td>
<td>192.00</td>
</tr>
<tr>
<td>CREDIT CARDS</td>
<td>70.00</td>
<td>CREDIT CARDS</td>
<td>169.00</td>
</tr>
<tr>
<td></td>
<td>1+2+3=A</td>
<td></td>
<td>1+2+3=B</td>
</tr>
<tr>
<td>TOTAL PX Day 1</td>
<td>$231.00</td>
<td>TOTAL PX Day 2</td>
<td>$1,151.00</td>
</tr>
</tbody>
</table>

PX SALES TOTAL: $1,382.00

PX CASH EXPENSES

Attach Receipts

$ 

$ 

$ 

TOTAL PX CASH EXPENSE: $0.00

TOTAL OF PX INCOME MINUS PX EXPENSES: $1,382.00

MISC INCOME: Donations, Rides, Tours

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>$ AMOUNT</th>
<th>DAY 2</th>
<th>$ AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DONATIONS</td>
<td></td>
<td>DONATIONS</td>
<td>27.00</td>
</tr>
<tr>
<td>RIDES</td>
<td></td>
<td>RIDES</td>
<td>5.00</td>
</tr>
<tr>
<td>TOURS</td>
<td></td>
<td>TOURS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4+5+6=F</td>
<td></td>
<td>4+5+6=G</td>
</tr>
<tr>
<td>TOTAL MISC DAY 1:</td>
<td>$0.00</td>
<td>TOTAL MISC DAY 2:</td>
<td>$27.00</td>
</tr>
</tbody>
</table>

TOTAL OF MISC INCOME: $27.00

TOTAL OF ALL INCOME: $1,409.00

Note: Never send cash. Convert all cash to a cashier's check or deposit directly into bank account.

Report/Count Day 1 by:

Day 1 Witnessed by:

Report/Count Day 2 by:

Day 2 Witnessed by:

PX REPORT PREPARED BY: Vicki Thomas

Funds Transmitted

Cashier's Check (or cash deposited) $1,150.00
Personal Checks $250.00
Credit Cards Other

TOTAL - Must equal I above:

($NOTE: DO NOT SEND CASH)

Mail/Expedite Report to:
Col Craig Langnes
28060 Parkerton Lane
Spring TX 77386
832-928-7817 (cell)

Deposit slip attached if appropriate.
SECTION 4

Marshalling

NOTE: Please do not assume that you are qualified to Marshall the B-17 until you have been trained.

When the B-17 is to be moved, (either with tug or under power), designated marshalling persons should be available to direct the aircraft.

This vintage bomber is a “tail-dragger”, and when marshalling any aircraft, you must make eye-contact with the PIC to effectively marshall. “If the PIC can’t see you, your efforts are fruitless.”

The Marshalling Signals Reference Diagrams appear on the following pages.
MARSHALLING SIGNALS

Fig. 1 **PROCEED TO NEXT MARSHALLER**
Right or left arm down, other arm moved across body and extended to indicate direction of next marshaller.

Fig. 2 **THIS MARSHALLER**
Arms above head in vertical position with palms facing toward aircraft.

Fig. 3 **MOVE FORWARD**
Arms a little aside, palms facing backwards and repeatedly moved upward-backward from shoulder height.

Fig. 4 **TURN TO THE LEFT**
Point right arm downward, left arm repeatedly moved upward-backward. Speed of arm movement indicating rate of turn. Make fist in right hand to indicate apply break.

Fig. 5 **TURN TO THE RIGHT**
Point left arm downward, right arm repeatedly moved upward-backward. Speed of arm movement indicating rate of turn. Make fist in left hand to indicate apply break.
**Fig. 6 SLOW-DOWN**
Arms down with palms toward ground then moved up and down several times.

**Fig. 7 SLOW-DOWN ENGINE(S) ON SIDE INDICATED**
Arms down with palms toward ground, then either hand moved up and down several times to indicate which side should be slowed down.

**Fig. 8 MOVE BACK**
Arms by sides, palms facing forward, arms swept forward and upward repeatedly to shoulder height. Do not bend arms at the elbow.

**Fig. 9 TURN WHILE BACKING-TAIL TO THE RIGHT**
Point left arm down and right arm at side with palm facing forward, is swept forward and upward repeatedly to shoulder height. Do not bend arms at the elbow.

**Fig. 10 TURN WHILE BACKING-TAIL TO THE LEFT**
Point right arm down and left arm at side with palm facing forward, is swept forward and upward repeatedly to shoulder height. Do not bend arms at the elbow.

**Fig. 12 PERSONNEL APPROACH AIRCRAFT**
Left hand raised vertically overhead, palm towards aircraft. The other hand indicates to personnel concerned and gestures towards aircraft.

**Fig. 13 STOP**
Arms crossed above the head, palms facing forward. This is the FAA signal for emergency stop.
<table>
<thead>
<tr>
<th>Fig. 14 START ENGINES</th>
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<tbody>
<tr>
<td>Circular motion of right hand at head level with left arm pointing to engine. Number of fingers extended on left hand indicates engine to be started. Thumb of right hand extended to indicate prime.</td>
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<table>
<thead>
<tr>
<th>Fig. 15 CUT ENGINES/ROTOR</th>
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<tr>
<td>Both arm and hand level with shoulder, hand moving across throat, palm downward.</td>
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<table>
<thead>
<tr>
<th>Fig. 16 ABANDON AIRCRAFT</th>
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<tr>
<td>Simulate unfastening seat belt and shoulder straps and throwing them up and off.</td>
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<table>
<thead>
<tr>
<th>Fig. 21 CHOCKS - INSERTED</th>
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<tbody>
<tr>
<td>Arms down, fists closed, thumbs extended inwards, swing arms from extended position inward.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fig. 22 CHOCKS - REMOVED</th>
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<tbody>
<tr>
<td>Arms down, fists closed, thumbs extended outwards, swing arms outwards.</td>
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<thead>
<tr>
<th>Fig. 23 LOWER WING FLAPS OR FLAPS ARE EXTENDED</th>
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<tbody>
<tr>
<td>Hands in front, palms together horizontally then opened from the wrist.</td>
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<table>
<thead>
<tr>
<th>Fig. 24 RAISE WING FLAPS OR FLAPS ARE UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands in front, horizontally, with palms open from the wrists, then closed.</td>
</tr>
<tr>
<td>Fig. 25 <strong>TAIL WHEEL/NOSE WHEEL LOCKED</strong></td>
</tr>
<tr>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Fig. 26 <strong>TAIL WHEEL/NOSE WHEEL UNLOCKED</strong></td>
</tr>
<tr>
<td>------------------------------------------</td>
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<tr>
<td>Fig. 28 <strong>WEAPON BAY OPEN</strong></td>
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<td>------------------------------------------</td>
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<tr>
<td>Fig. 29 <strong>WEAPON BAY CLOSED</strong></td>
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<td>------------------------------------------</td>
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<tr>
<td>Fig. 30 <strong>AFFIRMATIVE (ALL CLEAR)</strong></td>
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<td>------------------------------------------</td>
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<tr>
<td>Fig. 31 <strong>NEGITIVE (NOT CLEAR)</strong></td>
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<td>------------------------------------------</td>
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</tbody>
</table>
Fig. 43 **FIRE IN ENGINE OR APU**
Make rapid horizontal figure-eight motion at waist level with either arm, pointing at source of fire with the other hand.

Fig. 44 **HOT BRAKES**
Arms extended with forearm perpendicular to ground. Palms facing body.

Fig. 45 **HOT BRAKES LEFT SIDE**
Arms extended with forearm perpendicular to ground. Gesture indicates left side.

Fig. 46 **HOT BRAKES RIGHT SIDE**
Arms extended with forearm perpendicular to ground. Gesture indicates right side.

Fig. 53 **WAVE OFF**
Waving of arms over the head.

Fig. 56 **TAKE OFF THIS WAY (at pilot's discretion)**
Marshaller conceals left hand and makes circular motion of right hand over head in horizontal plane ending in a throwing motion of arm towards direction of take off.

Fig. 59 **LIGHTS ON**
Section 5

Flight Engineer
Fire Guard Duties
Loadmaster
Weight Form
Loading procedures for the Aircraft
Crew Manifest
FLIGHT ENGINEER RESPONSIBILITIES

PRE-FLIGHT RESPONSIBILITIES

Administrative
Check aircraft logbook for status
Insure required documents are on board
Obtain fuel load from PIC
Complete fuel & oil section of Weight & Balance form and give to Loadmaster

Aircraft Pre-Flight
Supervise / Perform fuel & oil loading of aircraft
Inspect aircraft as per pre-flight inspection SOP
Emergency hand-cranks on board (3)
Aircraft tie-downs on board (3 lines)
Aircraft chocks on board (3)
Astrodome closed prior to T/O
Passenger briefing (Normally done by PIC; FE should know location of legal seats
For T/O and Landing)

IN-FLIGHT RESPONSIBILITIES
Read Checklists (aloud, on request from PIC)
Radio listening watch
Scanning duties (fuel, oil leaks, traffic watch)
Operate bomb bay doors (on command by PIC)
Computes fuel status (back of wt/bal form: on request by PIC)
Call out airspeed on T/O & Landing (as briefed by PIC)
Assist passengers as required

POST-FLIGHT RESPONSIBILITIES
Assist passengers off aircraft (beware of props)
Obtain Hobbs Meter readings and enter into logbook
Secure all cockpit windows
Police-call all garbage off aircraft
Supervise exterior securing of aircraft:
  - Wheels chocked - Tie-downs secured
  - Pitot covers installed - Radio wire antenna flags secure
  - Ground wire installed - Aircraft locked (3 doors as per PIC)
  - Engine covers installed (as per PIC)
  - Norden bomb sight cover installed
  - Side windows & radio room hatch closed

TAXI RESPONSIBILITIES - Marshalling and Fire Guard responsibilities may be assigned by the PIC. See Marshalling Section for Signals. See next page for Fire Guard duties. During taxi, be aware and insure proper clearance of the horizontal stabilizers during turns, by monitoring through waist gun windows. If issues arise, notify PIC via intercom.
FIRE GUARD DUTIES

1. You should be wearing your leather gloves for these duties.
2. Remember, all communications with the cockpit shall be with the PIC, with the exception of starting engines 3 & 4 noted below.
3. The PIC will assign Fire Guard duties to either a Loadmaster or Flight Engineer during engine starts. When no other fire extinguisher is available, utilize the on-board extinguisher at the rear hatch. Dry Chemical is the suppressant. Place yourself in view of the cockpit on the co-pilot’s (right) side, ahead of and outboard of #3 engine.
4. Note by the co-pilot’s finger signal which engine he’s starting; he’ll start with #3 then move to #4 next.
5. The co-pilot will call out ‘CLEAR’. (This action is to make sure everyone is clear of the aircraft.)
6. You will then scan 360-degrees to insure all is clear. And when it is, you will respond back to the co-pilot ‘CLEAR’.
7. After receiving a visual “all clear” from the Fire Guard (three fingers in the air/right hand and circular motion with the left), the co-pilot will turn 9 blades and initiate prime on the ninth blade while the PIC activates engine start. The Fire Guard will indicate prime status by a right hand thumb up for no visual prime overflow or a thumb down to indicate visual prime overflow.
8. If, after engine start, everything about the engine looks normal, move the fire bottle to the next engine to be started.
9. Repeat for engine #4, then move to the pilot’s side and start number 2 and 1 in that sequence.
10. Once engines have started and there are no discernible problems, you may give thumbs up and move the fire bottle safely to the side and give a thumbs up, indicating this part of the sequence is complete.
11. At this point, turn the aircraft over to the Marshaller if required; otherwise if the pilot departs unaided simply render a salute.
12. NOTE: If these Fireguard duties are being performed by a crew Loadmaster during the departure from a Tour Stop, the pilot will direct you to remove the chocks, which you will take with you as you board the aircraft by the rear hatch. Turn the aircraft over to a ground marshaller, if provided, before you remove the chocks.

IN THE EVENT OF AN ENGINE FIRE WHILE STARTING - NOTE: A minor flame resulting from prime fuel igniting in the Induction Intakes or the Turbo/Exhaust areas are not cause for great concern and will usually blow out from propeller air and exhaust thrust.

1. If a major fire develops, point at the engine with your left hand and give the hand signal to indicate “FIRE”, making a figure 8 with your right hand in a horizontal motion.
   • **If fire is severe**, have someone call 911. If fire is growing, give the signal to the crew to abandon the aircraft. (Hands in front of the body, then quickly moving them over your shoulders).
   • **If fire is not catastrophic**, attempt to put it out with your fire extinguisher after the propellers have stopped turning.
2. All passengers must leave the aircraft immediately and remain clear until the fire is suppressed.
3. Once the Fire Department arrives, clear all persons from the area including you. This will expedite their fire fighting responsibilities.
CREW TRAINING & TOUR RESPONSIBILITIES

A. GENERAL
The selection, evaluation and initial qualifications of CAF B-17 crew members is governed by the CAF FEB, Program Manual, CAFR 60-2, dated January, 2012.

B. CREW MEMBER CATEGORIES
Pilots
Flight Engineers
Loadmasters

C. RATING AUTHORITY
Crew member rating orders are published by the appropriate CAF Headquarters as indicated:
1. HQS CAF
   B-17 Pilot
   B-17 Co-Pilot
   CAF Formation Rating

2. HQS, Gulf Coast Wing (GCW)
   B-17 Flight Engineer
   B-17 Loadmaster

D. GROUND SCHOOL / INDIVIDUAL STUDY
For most crew members, this phase of training will consist of the following:
1. Individual home study, using approved B-17 reference materials.
3. B-17 Check Out Questionnaire, which is an open-book exam to be completed during ground school.
4. Flight Engineers will also be required to complete hands-on training with the aircraft and complete an oral exam.
5. Loadmasters will be required to complete a hands-on training at the aircraft and cover proper loading procedures, passenger briefing, on-board safety and flight-deck communication procedures.
5. Pilot Training is covered by CAFR 60-2 and CAFR 60-3
LOADMASTER RESPONSIBILITIES

PRE-FLIGHT RESPONSIBILITIES

Administrative
Passenger Manifest - (both standard and revenue rides)
Hold Harmless - (both standard and revenue rides)
Weight & Balance Form (see example next page)
Passenger Briefing (normally handled by PIC, but Loadmaster may be asked to answer passenger questions for T/O and Landing).

Aircraft Pre-Flight
Cargo, Baggage and Traffic Cones / Pylons tied down
At notification of the PIC, brief passengers on seat-belt operation (latch & un-latch) and safety items
Prepare A/C by loading as described on pages 26-through-29
Windows and hatches secured (as per PIC)
Aircraft chocks on board (3 sets)
Aircraft tie-downs on board (3 lines)
Grounding wire on board
Area aft of tail wheel secure
Passengers seated with seat belts fastened for T/O
As directed by the PIC, briefs passengers (on revenue rides) on seat-belt use
Reports to the Mission Tour Director

IN-FLIGHT RESPONSIBILITIES (When Flying as Crew Member)
Scanning Duties (fuel, oil leaks, other aircraft)
Tail-wheel position (advise when tail-wheel up / down)
Intercom usage (requires use of push-to-talk headset)
Assist passengers as required
Be alert to passenger safety and in-flight irregularities
Communicate to Flight Engineer when passengers are secured for take/off & landing

TAXI RESPONSIBILITIES - Marshalling and Fire Guard responsibilities may be assigned by the PIC. See following pages 30 & 31 for Marshalling Signals. See page 34 for Fire Guard Duties. During taxi, be aware and insure proper clearance of the horizontal stabilizers during turns, by monitoring through waist gun windows. If issues arise, notify PIC via intercom.

POST-FLIGHT RESPONSIBILITIES
Assist passengers off aircraft (beware of props)
Chock wheels (mains first)
Secure windows, top hatch
Stow cargo tie downs and straps
Ground aircraft (assist pilot or FE)
Tie down aircraft (assist pilot or FE)
Police-call all garbage off aircraft
The Load Worksheet will be completed by the Loadmaster following the entries on the Fuel Worksheet made by the Flight Engineer.
LOADING THE AIRCRAFT

1 Loading bomb bay

- Luggage
- PX
- Spare parts
- Tools (under floor)
- Bombs (6)
- Seat
- Seat
- Seat
- Ammo Box 10 bpt
- Ammo Box 10 pt 6 bpt
- Ammo Box 9 tp 6 pt
- Seat + two
- Curtain for toilet

2 Operating curtain toilet

- Toilet
- Toilet Supplies

3 Loading tail section and cargo net

- Tent
- Gas can
- Cone bases
- Cones

pt - paper towels
tp - toilet paper
bpt - blue paper towels
LIGHTS ON BOARD THE AIRCRAFT
(For Special Events on Tour / with Limited Lighting)

Diagram for lights in plane
Please remove lights attached with velcro located on this diagram prior to authentic warbird contest in Oshkosh.

DO NOT PEEL VELCRO OFF OF AIRPLANE
LOADING IN THE BOMBAY

1. PX tables must be loaded into area below platform.
2. Table handles should be facing outwards pointing towards middle of bomb bay walkway.
3. Ugly side of green board must face inward.
4. Look for scrape in green board as a marking from the screw to be inserted into bottom right.
5. Green wood board must be placed at front of tables.
6. Green board must be pushed inward on right side and slotted behind the silver frame in picture 1.
7. Strap must be hooked from side to front and be tied down by orange strap.
LOADING THE TAIL SECTION WITH SUPPLIES

1. Before loading tail section, the net must be in place before loading can begin.
2. Net must be attached to the two D rings in the back first.
3. From looking into the tail hatch, the right side of the net must be attached first.
4. Place 10x10 tent in before the cones.
5. Tent must slide in forward first and slide it into the back.
6. Make sure the tent rests on the raised part at the back of the tail gunners position.
7. Place cones inside and slide them in to fit in the back on raised part of tail gunners position.
8. Cones will be placed on top of tent.
9. Rope goes on top of cones and gas can must be tied and secured with net through handle.
10. Cone bases will be placed in front of the cones and separated 5 on left side and 5 on right side of aircraft.
B-17 Rides Coordinator Handbook

Commemorative Air Force
Gulf Coast Wing

Honoring American Military Aviation Through Flight, Exhibition and Remembrance
Prepared by
B-17 Rides Coordinator
2/28/ 2015

Property of: ___________________________
B-17 REVENUE RIDES
“Living History Flight Experiences”

A. GENERAL
The B-17 TEXAS RAIDERS may be used to fly passengers for compensation or hire under certain conditions. The authority and procedures are outlined in CAFR 60-1, Chapter 3. The following guidelines are posted from that authority. The latest edition must always be used.

B. AIRCRAFT: LIMITED AIRWORTHINESS CERTIFICATE
1. The FAA has granted the CAF an exemption from FAR Part 91.315, 91.31(a), 119.5(g) and 119.21(a) (This includes the B-17) for the carriage of passengers for compensation and hire. A copy of FAA exemption 6802 must be carried on all CAF aircraft carrying passengers for hire.
2. CAF Headquarters must approve all PICs and SICs for each specific aircraft. The PIC and SIC must meet the standards in FAR Part 61. Headquarters approval will be made when the pilot qualification summaries are submitted.
3. Each passenger must be briefed prior to departure:
   a. No smoking on any CAF aircraft
   b. Proper use of seat belts and shoulder harness
   c. Location and means for operating/opening any emergency/egress door or exit
   d. Proper use of parachute, if one is available
   e. Use & location of emergency equipment specific to the B-17, such as fire extinguishers crash axe, life vests, rafts, etc.
   f. Specific use of aircraft intercom system
   g. In multi-seat aircraft, passenger positions for taxi, takeoff, cruise and landing
   h. Completion of Manifest/Hold-Harmless form (CAF Form HH-3)
4. All flights will begin and end at the same airport and will be conducted within a 25-statue-mile radius of that airport.
5. The Mission Rides Coordinator is responsible over the recording of payment donations on the CAF Manifest. The Mission Rides Coordinator assigned to the flight may collect the monies and manage the manifest, hold harmless and membership applications, then provide the manifest to the PIC for flight briefing.
   a. Original copies of the Supporting Member Applications accompanied by payments collected are sent to the B-17 Wing Finance Officer, along with a letter identifying how many passengers we are paying the Supporting Membership dues for, who then records and forwards payments of $75 per adult passenger to CAF Headquarters.
b. Original Manifest/Hold Harmless (CAF Form HH-3) and Minor Hold Harmless (CAF Form HH-2) forms are sent to and maintained by the Bomber Operations Officer for two years.

6. **Passengers must be 12 years of age or older to ride.** Passengers who are minors (under the age of 18) must have their parents or legal guardians sign the Minor Hold Harmless agreement (CAF Form HH-3). (The form no longer has to be notarized).

7. Passengers must complete a CAF Supporting Membership application, which is forwarded along with the copy of the manifest and monies to the Wing Finance Officer.

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C. **REVENUE RIDES PROCEDURES**

1. **Advanced Reserved Rides**
   
   Rides may be advance reserved through the GCW website or through the B-17 Rides Coordinator at B17RIDES@gulfcoastwing.org. When rides are advance reserved, every attempt to call, email and/or text the passenger ride info (names, phone #, address, email, remarks, etc.) to the Mission Tour Director or the Mission Rides Coordinator will be made. When on missions, the Mission Rides Coordinator must let the Rides Coordinator know of any on-site bookings ASAP so that those seats can be taken “off the market.”

2. **Passenger Check-In**
   
   When several rides have been reserved (ex: 1:00 p.m., 3:00 p.m., 5:00 p.m.), it is advisable to sort manifests and documents by Trip Number (ex: #1, #2, #3 etc.) since passengers may be checking in at all hours of the day. The Tours/Revenue Rides Black Briefcase/Suitcase (aka. “Football”) contains supplies for this (applications, manifests, hold harmless, information sheets, etc.).
   
   a. Prepare Supporting Membership Applications in advance if you have the time (enter name, address, phone number and email address).
   b. Use empty multi-colored envelopes for each trip number to collect/record monies.
   c. Not more than eight (8) passengers are accepted on any flight.
   d. We must have a minimum of four (4) passengers to “break even” on any revenue-ride flight if the nose section is reserved full or five (5) passengers if the nose-seats remain un-reserved.

3. **Collecting Payments**
   
   a. Count and re-count cash collected. Record all payments on manifest under the section “Colonel Number” (see sample manifest). If the purchaser wants a receipt, please complete a “Cash Receipt” form, also found in the Black Briefcase/Suitcase.
   b. All checks should be made payable to Commemorative Air Force.
   c. All major credit cards are also accepted. A credit card app that must be downloaded to
your smart phone will be used to authorize credit cards. You will have the option to forward a receipt to the passenger, so ask if they wish it to be sent via email or text and the address or number. You will also receive a receipt from the bank. Forward these receipts as soon as you can to the Finance Officer with the notation “Waist seat – Hondo” or “Two nose seats – Hondo.” If you have a problem accessing the internet, complete a credit card 3-part form, which may be found in the Black Briefcase/Suitcase. Account numbers must be exact. Please double check the account number when completing the 3-part credit card form. Include purchaser’s phone number, name, expiration date of the credit card, address and CVVC number on the form. Please run the credit card on your app ASAP and follow the above procedure.

4. **Passenger Ride Certificates and Challenge Coins**

Following the passenger ride, Passenger Ride Certificates imprinted with the passenger’s name, along with a Texas Raiders challenge coin, should be presented as the passengers deplane following their ride. If the laptop, certificate paper and the portable printer are not available, please send the ride reservation sheet which includes the passenger’s contact and address information printed legibly to the Rides Coordinator via email so that these may be mailed to the passengers.

**FORMS REQUIRED FOR PASSENGER PROCESSING**

**FORMS FOR PASSENGER REVIEW, BRIEFING & SIGNATURE:**
- Supporting Member Application
- Minor Hold Harmless form (CAF Form HH-2), if necessary
- Passenger Briefing Information

- After passenger has completed the form/forms noted above and the money collected, their signature is required on the Manifest/Hold Harmless form (CAF Form HH-3).
- Record the amount paid and the form of payment received on the Ride Reservation Sheet that are to be sent to the Rides Coordinator via email, leaving the originals in the Black Briefcase/Suitcase for return to the Rides Coordinator.

8. CC = Credit Card
9. GC = Gift Certificate
10. CASH = Cash
11. CK = Check

When the manifest has been returned following the Crew Safety Briefing, please email to the Bomber Operations Officer, Finance Officer and Rides Coordinator and then place the completed manifest inside the colored trip envelope for eventual tour reporting later.

**PLACEMENT OF FORMS AND PAYMENTS INTO COLORED RIDES ENVELOPES**
Completed Passenger form/forms placed into corresponding colored envelope
Collected payment inserted into corresponding payment envelope located inside colored envelope.
Ensure that the correct flight number corresponds with what the passenger is confirmed on, since sometimes passengers will be checking-in ahead of schedule.

COMMUNICATION WITH PASSENGERS

FORMS DESCRIPTION
- Speak clearly so that the customer understands what he/she is signing.
- Manifest/Hold Harmless Form (CAF Form HH-3) can be explained as a “release” in the event the passenger is harmed while on the aircraft. This will hold the CAF harmless, although many attorneys will dispute this.
- A minor, aged from 12 years through 17 years, will need to have a Minor Hold Harmless form (CAF Form HH-2) completed before acceptance as a passenger. (These no longer need to be notarized.)
- Advise the passenger upon check-in the approximate time and location where they are to meet for crew safety briefing. Discuss this with the PIC, so everyone is on the “same page with logistics.” You will need to verify that all passengers have arrived back in time for the passenger briefing under the wing, so you might have them all meet at the Rides table to take out to the plane as a group, unless distance makes this unfeasible.

Crew/Passenger Manifest

There is now a combined crew and passenger manifest that is to be used on every flight whether there are CAF flight crew only, flight crew and nonpaying passengers or paying passengers carried (under exemption 6802) or not. It is called: **CAF HH FORM #3, COMMEMORATIVE AIR FORCE PASSENGER MANIFEST WITH RELEASE AND HOLD HARMLESS AGREEMENT.**

- F. Passengers must sign upon check-in.
- G. Note the designation PAX and amount paid for each paying passenger under “Colonel Number” column. For nonpaying passengers put 0 for amount paid.
- H. Identify with Trip Number at the top and bottom of page.
- I. PIC= Pilot in Command.
- J. SIC=Second in Command.
- K. FE=Flight Engineer.
- L. LM=Loadmaster/Scanner.
- M. PAX = Passenger (paying passenger or not).
- N. It is the Loadmaster’s responsibility to check that all crew and non-paying passengers have signed.
- O. Completed form is to be returned to the Mission Rides Coordinator.
P. Form is scanned/photographed and emailed to Bomber Operations Officer, Finance Officer and Rides Coordinator.

Q. Form is filed with Ride Envelope.

R. Original forms to be carried back to DWH and given to Rides Coordinator or put in box on wall in hallway of triangle room only if they have been previously scanned and sent electronically as directed above.

S. Original Manifests/Hold Harmless forms should never be stored on-board the aircraft if they have not been electronically copied.

T. When the aircraft is scheduled for a sortie during a flying event or air show, the assigned Loadmaster should prepare the manifest, identifying the crew and securing CAF IDs and signatures. The completed/signed manifest should be given to the Mission Rides Coordinator and then scanned and emailed to the Ops Officer, Finance Officer and Rides Coordinator, then secured in an envelope addressed to the Bomber Operations Officer and given to the Rides Coordinator or put in box on wall in hallway of triangle room along with Revenue Rides manifests.

SAMPLE MANIFEST on following page.
COMMEMORATIVE AIR FORCE PASSENGER MANIFEST with RELEASE AND HOLD HARMLESS AGREEMENT HH - 3

This form must be completed in full prior to flight in any CAF aircraft with multiple crewmembers, or when carrying passengers. The pilot-in-command will sign one copy is kept with a responsible CAF member or responsible person (FBO or Host) at the point of departure. It is the responsibility of the pilot-in-command to see that these important details are properly completed. For paid rides, a copy of the manifest should be given to the unit finance officer and a copy sent to HQ finance. Include membership applications if applicable.

PAID RIDES ON THIS FLIGHT?  YES  X  NO

DATE  3/14/15  DEPARTURE POINT  KDWH

AIRCRAFT TYPE  - 17G  REG#  N7227C  DESTINATION  KDWH

AC Category (circle one): Experimental/Limited/Standard

AC Category (circle one): Experimental/Limited/Standard

UNIT NOTES  Gulf Coast Wing

KNOW ALL MEN BY THESE PRESENT: WHEREAS, THE UNDERSIGNED desire to participate in Commemorative Air Force air show activities and/or fly or take a flight as pilot, copilot or crewmember or passenger in Commemorative Air Force aircraft, and whereas I will be doing so entirely upon my own initiative, risk and responsibility, now, therefore, in consideration of the permission extended to me by the Commemorative Air Force, through its officers and agents to participate in Commemorative Air Force air show activities and/or fly or take said flight or flights in Commemorative Air Force aircraft as pilot, copilot, crewmember or passenger, I do hereby, for myself, my heirs, executors, and administrators, release and forever discharge and hold harmless the Commemorative Air Force, its administrators, and all its officers, agents, servants and employees, acting officially or otherwise, from any and all claims, demands, actions or causes of action including fault or negligence on the part of the Commemorative Air Force, its administrators, officers, agents, servants or employees, during such participation flying or flight or continuation thereof, as well as all ground and flight operations incident thereto. I am fully cognizant that no or only limited passenger liability insurance exists on behalf of the CAF for this flight.

I SPECIFICALLY AGREE TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE CAF FROM ANY LIABILITY WHATSOEVER ARISING OUT OF CAF'S SOLE AND/OR COMPARATIVE NEGLIGENCE.

NOTE: Some life insurance policies do not cover you if you fly in a non-standard category aircraft. If you are concerned please check with your insurance company.

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<thead>
<tr>
<th>First and last Name (Print)</th>
<th>Check block if crewmember</th>
<th>Colonel Number</th>
<th>Phone Number</th>
<th>Emergency contact name and phone number (Print)</th>
<th>I have read, agree with and fully understand this document</th>
<th>Signature</th>
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<td>Pat Elliott, Sr.</td>
<td>X</td>
<td>1211</td>
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<td>John Smith 444-444-4444</td>
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<td>Ted Doggett</td>
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CREDIT CARDS

The GCW uses Chase Paymentech Card Readers (SEE NOTE) to process credit cards. This device attaches to a Smartphone and allows us to swipe the customer’s credit card in the field and get authorization and confirmation of the transaction on the spot. The funds are automatically credited to our bank account immediately (no need to "batch out").

Before you can use a Card Reader, you must have a User Name and Password. Contact the Finance Officer, Col Craig Langnes, to set this up for you.

You must download the Chase Mobil Checkout application from the App Store or Google Play on your Smartphone.

1. Launch the application
2. Enter your User Name and Password
3. Plug the Card Reader into your Smartphone, turn your volume up all the way, and make sure the application is open to the entry screen. Listen for the Card Reader to snap into place.
4. Press "Sale" (or "Refund"). Enter the amount of the purchase (or refund). Press "Continue". Your Card Reader will then light up and be ready to use.
5. On the "Enter Card" screen, swipe the card (strip down and towards the back of the Reader). Expiration Date and Security Code will automatically populate.
6. In the "Reference" section, enter either PX, tours, donation, etc.
7. You can also enter the credit card information manually. Follow the prompts.
8. Once the transaction is approved, the signature screen will come up. Have customer sign (with the stylus which is kept in the cash box).
9. If the customer desires a receipt, enter either their email address or cell phone number on the next screen. Chase Paymentech will automatically email or text the receipt to them. You will also receive an email of each receipt.
10. At the top of the home screen, the total number of transactions for that day, as well as the total amount of credit card charges, will be displayed. You will use this when preparing your PX Report for the mission.
11. The Help Desk Number is 866-428-4967 should you need assistance. Inside the Card Reader box, you will find a small piece of paper which contains all the information you will need to give the representative at the Help Desk.
12. You will need to charge the Reader each night before using the next day.
A purchase of **at least $15.00** is required to process a credit card transaction.

**NOTE: The Card Readers are currently not working; you can still use the Chase app to take credit cards manually; the readers may be used again at a future date. See the Rides Coordinator for more details.**

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**TOUR OPERATIONS REPORT**

A. **ORGANIZATIONAL REPORTING**

The B-17 income and expenses are to be reported to the Wing Finance Officer. **Income and expenses are separated from all other Wing expenditures.** When touring with TEXAS RAIDERS, complete the Tour Report at the end of the tour stop and forward this to the B-17 Wing Finance Officer with a copy to the B-17 Operations Officer and Rides Coordinator. The following type of income is considered B-17 income:

- a. Tour Revenues
- b. Bomb Donations
- c. Appearance Fee
- d. Revenue Rides Monies
- e. Private T/R Donations
- f. Gas and Oil Donations

B. **TOUR REPORT**

1. Always count cash, checks and credit card receipts with a fellow tour member (witness).
2. Secure the Appearance Fee check prior to leaving the tour stop. All Appearance Fee checks must be made payable to **Commemorative Air Force**.
3. If the B-17 is restricted from conducting tours or rides at the tour stop, please indicate the reasons (i.e. *Air Force Base restricts revenue collection, or area flash-floods closed the airport, etc.*) on the report.
4. Fuel and oil purchases will be made with a central billing charge account (a Multi-Services Card or a VISA wing credit card) found in the upper shelf behind the pilot-seat. Wing members should avoid using personal credit cards for such purchases.
5. Do not send cash with the Tour Report. Cash must either be converted into a *Cashiers Check or Money Order* or if you find a CHASE bank, you can deposit the cash and checks before sending the funds and Tour Report to the B-17 Wing Finance Officer.
6. The report must be submitted within the week following the last tour stop or it is considered delinquent.
7. **Do not mix PX monies with Tour monies.** The PX-Report and funds are sent to the Wing Finance Officer, and this must be separated from any B-17 monies as
denoted above.

8. Under no circumstances are CAF funds (be it Tours or PX monies) to be deposited into any other account other than an official “CAF Bank Account.” A sample of the Tour Report Follows.

9. The packet to be sent to the Finance Officer will include the Tour Report, the letter indicating number of passengers, the original deposit slip, copies of any checks deposited, the original Gift Certificates received on the mission with value written on each Certificate, any receipts for expenses and the Supporting Member Applications.

10. There is a Gift Certificate log located in the black notebook within the Black Briefcase/Suitcase. Make sure that a Gift Certificate has not previously been used. Please note on the log that the Gift Certificate has been used and the date. This log will also show you the value of the Gift Certificate.
COMPLETING THE TOUR REPORT

Count the tour monies with another crew member, after the $50 “seed-money” has been returned to the cash pouch. Record this in AIRCRAFT TOURS.

Indicate the number of passengers by the amount paid (i.e. $475, $700, $750, etc). Indicate the number of Gift Certificates previously paid, then add these up. Place the total on (C)

If there were donations or appearance fee checks, please indicate on (D) and (E). Then total A + B + C + D + E + F

If there were items (such as ice, water, paper towels, machine-parts, etc) for which payment was taken from the aircraft tours money, please list that under TOUR EXPENSES, and include the receipts for the purchased items. This is then deducted from the original total.

If fuel and/or oil are donated at this stop, please note the amounts donated.

SEE SAMPLE TOUR REPORT NEXT PAGE
<table>
<thead>
<tr>
<th>SOURCE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRCRAFT TOURS - cash</td>
<td>$3520</td>
</tr>
<tr>
<td>AIRCRAFT TOURS - checks</td>
<td>$3540</td>
</tr>
<tr>
<td>AIRCRAFT TOURS - credit cards</td>
<td></td>
</tr>
<tr>
<td>Other Cash Donations from Tours</td>
<td>$22</td>
</tr>
</tbody>
</table>

**REVENUE RIDES**

- 28) Passengers @ $475/person
- 6) Passengers @ $750/person
- 5) Passengers @ $700/person
- 6) Passengers @ $425

**CASH RECEIPT TOTAL** (Must equal "H" below)

- Gift Certificates Surrendered (previously paid) $2,350

**INCOME TOTAL** (A + B + C + D + E + F) $2,5712

**TOUR EXPENSES**

- CASH EXPENSE RECONCILIATION
- **TOTAL CASH EXPENSE RECEIPTS** $2,5712

**TOTAL OF INCOME MINUS EXPENSES** ("G" minus "H") $2,5712

**FUNDS TRANSMITTED**

- Cashier's Check / or / Deposit $3,542
- Appearance/Show Check/Deposit $0
- Gift Certificates (Previously Paid) $2,350
- Personal Checks / Deposit $8,125
- Traveler's / Other Checks $0
- Credit Cards $1,195

**TOTAL** - Must equal "K" above $2,5712

**Mail Extra Copy of Report to:**
- Col. Pat Elliott, Sr.
  6609 FM 2621
  Brenham, TX 77833
  979.830.3530 cell

**Mail/Expedite Report to:**
- Col. Craig Langnes
  28306 Parkerton Lane
  Spring, TX 77386
  832.928.7817 cell

**Note:** Make copies of deposit slips and any checks to attach to report.
<table>
<thead>
<tr>
<th>SOURCE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Aircraft Tours - Cash</td>
<td>$[A]</td>
</tr>
<tr>
<td>B) Aircraft Tours - Checks</td>
<td>$[B]</td>
</tr>
<tr>
<td>C) Aircraft Tours - Credit Cards</td>
<td>$[C]</td>
</tr>
<tr>
<td>D) Other Cash Donations</td>
<td>$[D]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenue Rides [A] Passengers @ $475/person</th>
<th>[B] Passengers @ $750/person</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH Payments [1] $</td>
<td>$[1]</td>
</tr>
<tr>
<td>CHECK Payments [2] $</td>
<td>$[2]</td>
</tr>
<tr>
<td>CREDIT CARD Payments [3] $</td>
<td>$[3]</td>
</tr>
<tr>
<td>REVENUE RIDES TOTAL (#1 + #2 + #3 + #4): $</td>
<td>$[C]</td>
</tr>
</tbody>
</table>

**TOTAL CASH EXPENSE RECEIPTS** $[H]

**TOTAL OF INCOME MINUS EXPENSES ("G" minus "H")** $[K]

**Funds Transmitted**
- Cashier's Check or Deposit $[L]
- Appearance/Show Check/Deposit $[M]
- Gift Cert Values (Previously Paid) $[N]
- Personal Checks / Deposit $[O]
- Traveler's / Other Checks $[P]
- Credit Cards $[Q]
- **TOTAL - Must equal "K" above** $[R]

---

Note: Make copies of deposit slips and any checks to attach to report.
__________, 2015

Col. Craig Langnes  
Gulf Coast Wing CAF – Finance  
28306 Parkerton Lane  
Spring, TX  77386

Re:  CAF / GCW Tour Report for  
     And Supporting Member Applications

Dear Craig:

Please find the Tour Report for __________________________ enclosed.

The enclosed Supporting Member Applications should be forwarded to CAF Headquarters to the attention of the Secretary/Treasurer and should be accompanied by a check payable to the Commemorative Air Force.

<table>
<thead>
<tr>
<th>Number of Adult Paying Passengers</th>
<th>Fee per Passenger</th>
<th>Total</th>
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<tbody>
<tr>
<td>________________________________</td>
<td>_______ $75 =</td>
<td>$ ____</td>
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</table>

Thanks for your help with this. Let me know if you have questions.

Sincerely,

__________________________
Gulf Coast Wing CAF  
B-17 Mission Rides Coordinator

Enclosures/Attachments
When ready to deposit the cash and checks, you will find GCW BANK deposit slips in the blue cash pouch. Tape all Gift Certificates with amounts on the certificates to sheets of paper and copy any checks received to be sent to the Wing Finance Officer along with the original deposit slip. "Fill-in-the-Blank" letterheads are included in the "Football" (Black suitcase) to send detailing amount to be sent to CAF HQ. Please copy all items sent to the Finance Officer, in the event this is lost, misplaced or not-delivered.

THE FOLLOWING PAGES CONTAIN CLEAN COPIES OF DOCUMENTS THAT CAN BE USED TO MAKE COPIES IF NEEDED.
COMMEMORATIVE AIR FORCE PASSENGER MANIFEST with RELEASE AND HOLD HARMLESS AGREEMENT HH - 3

This form must be completed in full prior to flight in any CAF aircraft with multiple crewmembers, or when carrying passengers. The pilot-in-command will insure one copy is left with a responsible CAF member or responsible person (FBO or Host) at the point of departure. It is the responsibility of the pilot-in-command to see that these important details are properly completed. For paid rides, a copy of the manifest should be given to the unit finance officer and a copy sent to HQ finance; include membership applications if applicable.

Paid rides on this flight? YES __ NO __

Pilot in Command (PRINT) ____________________________ Col. __________

Date ____________________________ Aircraft type ________________ N ____________

AC Category (circle one): Experimental/Limited/Standard

Departure Point ____________________________ Destination ____________________________

Unit contact/ phone number ____________________________

Unit Notes ____________________________

Know all men by these present: Whereas, the undersigned desire to participate in Commemorative Air Force air show activities and/or fly or take a flight as pilot, co-pilot or crew member or passenger in Commemorative Air Force aircraft; and whereas I will be doing so entirely upon my own initiative, risk and responsibility; now, therefore, in consideration of the permission extended to me by the Commemorative Air Force, through its officers and agents to participate in Commemorative Air Force air show activities and/or fly or take said flight or flights in Commemorative Air Force aircraft as pilot, co-pilot, crewmember or passenger, I do hereby, for myself, my heirs, executors, and administrators remise, release and forever discharge and hold harmless the Commemorative Air Force, its administrators, and all its officers, agents, servants and employees, acting officially or otherwise, from any and all claims, demands, actions or causes of action including fault or negligence on the part of the Commemorative Air Force, its administrators, officers, agents, servants or employees, during such participation flying or flight or continuation thereof, as well as all ground and flight operations incident thereto. I am fully cognizant that no/or only limited passenger liability insurance exists on behalf of the CAF for this flight. I SPECIFICALLY AGREE TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE CAF FROM ANY LIABILITY WHATSOEVER ARISING OUT OF CAF'S SOLE AND/OR COMPARATIVE NEGLIGENCE.

Note: Some life insurance policies do not cover you if you fly in a non-standard category aircraft. If you are concerned please check with your insurance company.

<table>
<thead>
<tr>
<th>First and last name (Print)</th>
<th>Check block if crewmember</th>
<th>Colonel number</th>
<th>Phone number</th>
<th>Emergency contact name and phone number (Print)</th>
<th>I have read, agree with and fully understand this document</th>
<th>Signature</th>
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</table>
Supporting Member Ride Program

Taking a ride in select CAF Aircraft, automatically entitles you to a 1-year Supporting membership in the CAF. As a Supporting Member you will receive a quarterly subscription to the Digital Dispatch, the online version of the official magazine of the Commemorative Air Force. You will also receive a Supporting Member card.

☐ Mr.  ☐ Miss.  ☐ Ms.  ☐ Mrs.

NAME (please print) __________________________

Mailing Address:

City __________________________ State ________ Zip ________

Home Phone____________________ Business Phone__________

Email__________________________ (required to receive your subscription to Digital Dispatch)

Date of Birth________ Married ☐ if yes, spouse’s name________________

Present Occupation________________________

Would you like information on becoming a Colonel in the CAF? ☐ Yes ☐ No

I understand that Supporting Membership in the Commemorative Air Force does not entitle me to purchase or wear authorized CAF uniforms, nor to be a member of any CAF Unit, nor to vote in any CAF election.

Your signature

As a supporting member of the CAF you are entitled to receive the monthly digital version of Dispatch. Notification of new issues will be sent to your E-mail. Your E-mail address must be provided above to receive the notifications.
OBJECTIVES OF THE COMMEMORATIVE AIR FORCE

1. To acquire, restore, and preserve in flying condition a complete collection of combat aircraft which were flown by all military services of the United States, and selected aircraft of other nations, for the education and enjoyment of present and future generations of Americans.

2. To construct or obtain museum buildings for the permanent protection, maintenance, and display of these historic aircraft, period artifacts, and documents as a tribute to the thousands of men and women who built, serviced, and flew them and to build and organize the "Combat Airmen Hall of Fame."

3. To perpetuate the spirit in which such combat aircraft were flown in the defense of our nation, in the memory and hearts of all Americans.

4. To establish an organization having the dedication, enthusiasm, and Esprit de Corps necessary to operate, maintain, and preserve these aircraft as symbols of our American Military Aviation Heritage.

If the donor information is different from the ride applicant, please complete the following:

☐ Mr. ☐ Miss. ☐ Ms. ☐ Mrs.

Donor First Name: __________________________

Donor Last Name: __________________________

Street Address: __________________________

City: __________________________ State: __________ Zip: __________

The Commemorative Air Force is a non-profit organization exempt from Federal Income Tax under Section 501(c)(3) of the Internal Revenue Code.

COMMENORATIVE AIR FORCE
PO BOX 62000
MIDLAND, TX 79711-2000
(432) 563-1000 Ext. 2221
TOLL FREE (877) 767-7175
FAX (432) 563-8046
www.commemorativeairforce.org
www.airsho.org
STATE OF TEXAS

CAF HH FORM # 2 MINOR HOLD HARMLESS

COUNTY OF MIDLAND

KNOW ALL MEN BY THESE PRESENTS:

Please Print

WHEREAS, ______________________ is a minor, desires to participate in
Commemorative Air Force air show activities and/or fly in aircraft owned and/or operated by the
Commemorative Air Force and the American Airpower Heritage Flying Museum (hereinafter
collectively “the CAF”) as a passenger; and I/we, the undersigned, the parents and/or legal
guardian(s) of said minor be allowed to do so and are executing this release for the purpose of
permitting such activity by said minor.

It is understood and agreed that wherever the words “I” or “my” or other first person,
singular pronouns are used below, such terms shall include the minor on whose behalf this release
is executed and the parents and/or legal guardians of said minor, whether specifically named or
not, and wherever our initials or signatures appear on this release, the same are signed by us for
ourselves individually and as parents and/or legal guardian(s) of said minor. ________

INITIALS, parents and/or legal guardians.

I understand and acknowledge that my participation in any CAF activity and flight on any
CAF aircraft is purely voluntary. I have not received, nor will I ever receive, any compensation
of any nature whatsoever for my participation in any CAF activity or flight on any CAF aircraft.

I further understand and acknowledge that CAF activities, including without limitation,
fiying in CAF aircraft, is a purely recreational activity. CAF aircraft are vintage aircraft that are
primarily of a design, type, kind or character built in the period approximately 1930 through
1950. Most if not all, CAF aircraft are more than 40 years old. Flying in CAF aircraft is an
inherently dangerous and hazardous activity, and I accept the risks and hazards of the same,
including without limitations the risks of personal injury or death. ________

INITIALS

I further understand and acknowledge that but for my voluntary execution of this release
of liability, the CAF would not allow me to participate in CAF air show activities and/or fly in
CAF aircraft in any capacity.

Accordingly, I do hereby, for myself, my heirs, executors, administrators and assigns,
RELEASE, ACQUIT AND FOREVER DISCHARGE AND HOLD HARMLESS the CAF, its
administrators, officers, agents, servants, employees, divisions, subsidiaries, related
organizations and members, whether acting in an official capacity on behalf of the parties hereby
released or individually, from any and all claims, demands and causes of action of any nature
whatsoever, whether in contract or in tort or under any other legal theory, arising out of or in any
way related to my participating in CAF air show activities and/or flight in any CAF aircraft.

_______ INITIALS

(OVER)
CAF HOLD HARMLESS AGREEMENT #2
(MINORS)

I recognize and agree that this release is a release of the CAF, its administrators, officers, agents, servants, employees, divisions, subsidiaries, related organizations and members, whether acting in an official capacity on behalf of the parties hereby released or individually, from any and all claims, demands and causes of action of any nature whatsoever arising out of CAF's sole and/or comparative negligence, including any future sole and/or comparative negligence of CAF. I further recognize and agree that this release is a release of the CAF from any claims, demands and causes of action of any nature whatsoever arising out of any malfunction, design defect and/or manufacturing defect in any equipment or tangible personal property owned by CAF.

In the event any suit is brought against the CAF by me or anyone acting by, through or under me, including without limitation my heirs, executors and/or statutory beneficiaries for claims arising out of any injuries or damages suffered by me, including without limitation, death, as a result of my participation in any activity that is the subject of this release, including without limitation flight in CAF aircraft, I hereby agree, for myself, my heirs, executors, administrators and assigns, to INDEMNIFY, DEFEND AND HOLD HARMLESS the CAF, its agents, servants, employees, divisions, subsidiaries, related organizations and members from any and all liability for any sums which might be payable to anyone by reason of said injuries, damages, and/or death and for the costs, including without limitation attorney's fees incurred by the CAF in defense of such lawsuit. I SPECIFICALLY AGREE TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE CAF FROM ANY LIABILITY WHATSOEVER ARISING OUT OF CAF'S SOLE AND/OR COMPARATIVE NEGLIGENCE.

I have read this release and fully understand its contents. No representation has been made to me by the CAF or anyone acting on its behalf to induce me to sign this release except as stated herein. The release contains all of the representations that have been made to me regarding the CAF's responsibility for injuries and/or death that I may suffer as a result of my participation in the activities covered by this release and/or flight in CAF aircraft. No other agreement regarding matters covered herein exists between me and the CAF or anyone acting or purporting to act on behalf of CAF except as is stated in this release. I fully recognize that by signing this release, I am releasing the CAF, and it is my intent to release the CAF, from any and all liability that may arise out of any injury and/or death that I may suffer while engaged in CAF activities or flying in CAF aircraft.

PARTICIPANT SIGNATURE: __________________________
CADET#: __________________________ DATE: __________________________

PARENT/LEGAL GUARDIAN/Sign Date: __________________________

Printed Name: __________________________
PARENT/LEGAL GUARDIAN/ Printed name & Date: __________________________

WING OR SQUADRON: __________________________

In case of an emergency, please contact: __________________________ at __________________________

Witnessed by: __________________________
PRINT NAME: __________________________ SIGNATURE: __________________________

This Hold Harmless must be witnessed by a non-flying CAF member (not on the flight manifest of the same aircraft the minor will be flying upon). The witness can print their name and then sign. NOTARY NOT REQUIRED.

REVISED: August 2013
Passenger Briefing Information

Before permitting a person to be carried on board a CAF aircraft for the purposes authorized under the FAA exemption 6802 (or its latest revision), PICs will inform that person that the airplane holds a limited airworthiness certificate or experimental airworthiness certificate, whichever is applicable. The significance of the airworthiness certificate as compared to a standard airworthiness certificate; and the fact that the FAA has authorized this flight under a grant of exemption from the requirements of FAR 91.315, 91.319(a), 199.5(g), and 119.21(a) shall be explained to the person on board. The explanation of the significance of a limited airworthiness certificate or experimental airworthiness certificate, as appropriate, compared to a standard airworthiness certificate must include at least the following information:

The FAA has not established nor has it approved limited or experimental category airworthiness certificated aircraft manufacturing standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA-approved standards, including standards addressing the design of the aircraft and life-limited parts.

- **A Limited** category airworthiness certificated is issued when the FAA finds the aircraft:
  - Has been previously issued a limited category type certificate and the aircraft conforms to that type certificate.
  - Is in a good state of preservation and repair and is in a safe operating condition.

- An aircraft may be issued an **experimental** airworthiness certificate for the purpose of exhibition when the aircraft is intended only for exhibition of the aircraft’s flight capabilities, performance, or unusual characteristics at air shows, motion picture, television, and similar productions and the maintenance of exhibition flight proficiency, including (for persons exhibiting the aircraft) flying to and from such air shows and productions.

- **Standard** category airworthiness certificates are issued for an aircraft when the FAA finds the:
  - Aircraft has been built and maintained in accordance with that aircraft’s type certification standards as established by the FAA.
  - Aircraft inspection and maintenance requirements are in compliance with the applicable FAR.

I __________________________________ have been briefed on the subject matter above and understand the material in its entirety.

(Passenger)

Passenger ____________________________ Date: ____________

Print Name __________________________ Signature

Briefed by ____________________________ Date: ____________

Print Name __________________________ Signature

End Of Text
Section 7

Cadet Membership
Cadet Forms
CADET MEMBERSHIP & PARTICIPATION

General Policies

Definition - A Cadet membership in the Commemorative Air Force for students aged 13 to 23 is designed specifically for the young adult who wishes to become active with the CAF and for the college student on a budget. This is available to young men and women in junior high school and is extended through the college years to age 23. (A valid student ID is requested).

Privileges - CAF Cadet membership entitles the Cadet to receive:
- Membership Card
- Commission Certificate
- CAF Cadet Wings
- CAF Cadet Name tag
- CONTRAILS Newsletter
- DISPATCH Magazine
- Ghost Squadron T-Shirt
- Free admission to American Airpower Heritage Museum
- Gift Shop Discounts (10%)
- COWL FLAPS monthly newsletter (GCW members only)

Flying Privileges - CAFR 60-1 lists the following regarding Cadet Flights on CAF Aircraft:
- No person under the age of 13 may fly in CAF aircraft
- Cadets and Associate Members over 13 but under the age of 18 must furnish a notarized Hold Harmless form signed by a parent or legal guardian.
- Cadets 18 and older must sign the same Hold Harmless forms used for adults.

Cadet Safety - The GCW stresses safety in the following areas:
COMMEMORATIVE AIR FORCE
P.O. BOX 62000
MIDLAND, TX 79711-2000
(432) 563-1000 • FAX (432) 563-8046
TOLL FREE (877) 767-7175
www.commemorativeairforce.org

CADET APPLICATION

NAME

MAILING ADDRESS

(City) (State) (Zip)

HOME PHONE EMAIL

SCHOOL YOU ARE ATTENDING

PARENTS OR GUARDIAN

ADDRESS/PHONE

List CAF members, if any, with whom you are acquainted

Do you wish to affiliate with a CAF Unit? YES If yes, which Unit?

Print name as you would like it to appear on name tag

T-Shirt size: M (38-40) L (42-44) XL (46-48) (Circle one)

Are you a pilot? YES Total flying hours What aircraft types have you flown?


Ratings:

Please complete other side

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2. To construct or obtain museum buildings for the permanent protection, maintenance, and display of these historic aircraft, period artifacts, and documents as a tribute to the thousands of men and women who built, serviced, and flew them and to build and organize the “Combat Airman Hall of Fame.”

3. To perpetuate the spirit in which such combat aircraft were flown in the defense of our nation, in the memory and hearts of all Americans.

4. To establish an organization having the dedication, enthusiasm, and Esprit de Corps necessary to operate, maintain, and preserve these aircraft as symbols of our American Military Aviation Heritage.

The COMMEMORATIVE AIR FORCE is a self-supporting, all-volunteer organization. It is non-profit, tax-exempt and incorporated under the laws of the State of Texas for charitable and educational purposes.

I certify that the statements made by me in this application are true, to the best of my knowledge and belief, and are made in good faith. I will give my full support to the aims and objectives of the COMMEMORATIVE AIR FORCE and will assist the General Staff in attaining these goals.

Applicant's Signature

Application cannot be processed unless proper signature is affixed.

Date

Annual dues are $45. Please remit $45 with this application.

Annual membership dues of $45 include $30 for a 1-year subscription to Dispatch. If you do not wish to receive The Dispatch please check here. (Membership dues will remain $45)

☐ A check is enclosed. ☐ Please charge to credit card

☐ MasterCard ☐ Visa ☐ Discover ☐ American Express

Card Number Expires Date

The Commemorative Air Force is a non-profit organization exempt from Federal Income Tax under Section 501(c)(3) of the Internal Revenue Code.

COMMEMORATIVE AIR FORCE
P.O. BOX 62000
MIDLAND, TX 79711-2000
(432) 563-1000 Ext. 221
FAX (432) 563-8046
www.commemorativeairforce.org
www.airsho.org
B-17G Texas Raiders History
(N7227C)

==History of the B-17, “The Queen of the Skies”==

Compiled By Chris Ebdon, 02/22/13
Gulf Coast Wing, Historian

Boeing designed the B-17 for a contract that called for 200, and by the end of production, Boeing, Douglas, and Vega aircraft companies had built a total of 12,731! Of those, about 50 B-17 airframes survive today, most being on static display. Of those survivors, only about 9 of are flyable at any given time.

“Texas Raiders” was one of a block of 100 B-17’s contracted for in 1944 by Douglas Aircraft Company at their Long Beach, California plant after the Boeing and the Vega companies had already closed their B-17 lines. She was one of the last 20 B-17s built by Douglas, which makes her the youngest of the B-17s currently flying.

She was delivered on July 12, 1945, and by that time the USAAF did not have a need for B-17s. On July 21st of 1945, all 20 of those last Douglas B-17s were transferred to the U.S. Navy to serve as PB-1W Patrol Bombers. B-17G #44-83872 was assigned the Navy Bureau of Aeronautics Number (BuNo.) 77235.

Of the 22 PB-1Ws that were created, only 3 airframes survive today. Of those 3, ONLY “Texas Raiders” still flies, the other 2 PB-1Ws are stripped out hulks on display as B-17Gs at Barksdale and Eglin AFBs. This makes “Texas Raiders” the oldest airborne early warning and control (AWACS) aircraft currently flying.

==Airborne Early Warning Electronics Development==

In 1944, the Japanese started the Kamikaze attacks on U.S. shipping. This made long-range detection of aircraft a top priority for the U.S. Navy.

== Project Cadillac ==

The Navy had been doing research and development on radio detection and ranging equipment, or RADAR, since the early 1920s. The inter-service program was an based at the Massachusetts Institute of Technology’s (MIT) Lincoln Radiation Lab (Rad Lab), along with the Naval Research Lab. Together, they demonstrated the ability to place RADAR in a Grumman TBM Avenger and transmit the video image via FM TV data link, to the navy fleet’s Combat
Information Center (CIC). The battle commanders on the ship would assess the data and then react to it. Due to the FM TV signal’s very short range, it was determined that command and control needed to be aloft with the RADAR as the commands could be sent via radio from a longer way out.

===Project Cadillac II===

“Project Cadillac II” was tasked with combining patrol, AEW, ECM, ASW, and hurricane hunter capabilities into a single aircraft. The aircraft would have its own CIC, with the RADAR operators and battle commanders onboard, making it a flying command post. *The Navy had developed the first Airborne Early Warning and Control System (AWACS) aircraft!*

==The PB-1W is Born==

The Navy used B-17s to modify into the PB-1W, and there would eventually be a total of 22 Navy owned B-17s fully upgraded to PB-1Ws.

The transformation took place by installing flooring and P-38 Lightning 300 gallon drop tanks on each wing. The 3,400 gallons of fuel gave the PB-1W the endurance of 22+ hours of flight time. The look-down RADAR’s rotating antenna was belly-mounted in a bulbous housing below what used to be the bomb bay. The RADAR relay transmitter, advanced version of Identification friend or foe (IFF), Radio direction finder (RDF), instrument landing system (ILS), and long range navigation (LORAN) were also installed at that time.

In the nose, the chin turret and Norden bomb sight were removed, while the auto pilot remained. The Bombardier’s station remained as a look out post. The navigator’s position was left unchanged.

In the Cockpit, the top gun turret and armor were removed, and the control panels were redesigned so that both aircrew had the same instrumentation for both redundancy and flight crew ergonomics.

The bomb bay had 2 RADAR consoles mounted on either side of the walkway with the operators facing aft. The CIC Officer was seated at the right rear of the bomb bay and the left side contained electronic and radio equipment. There were both plotting boards and status boards for the tracking of U.S. assets and enemy targets.

In the Radio Room, the radio operator's table was turned so that the operators faced outboard. The waist section had the guns and ball turret removed, and bench seats were installed at the waist windows for observers. Floating smoke buoys were carried to mark a position or target. A latrine and kitchen area with a stove was included and the putt putt, or APU, remained to provide auxiliary power. The tail guns, seat, and armor were removed, leaving room for spare parts or cargo.
The typical B-17 bomber crew was usually 10. Navy PB-1W flight crew consisted of 6 officers, (PIC, SIC, Nav, CIC Officer, 2 RADAR Operators) and 5 enlisted men (Plane Captain, 2nd Mech, Electronics Tech, and 2 Radio Operators).

Besides providing RADAR early warning, air controlled intercepts and airborne CIC for forces afloat and ashore, PB-1Ws flew as “picket aircraft”, extending the RADAR coverage far out into the sea. The secondary missions were: Scouting, ASW, SAR, ECM, weather recon, and dropping of practice anti-aircraft “drones”.

==Texas Raiders' Service History==

===VPB-101 / VX-4===

Patrol Bomber Squadron 101 (VPB-101) was stationed at NAS New York, better known as Floyd Bennett Field in Brooklyn, where BuNo 77235, would first serve. VPB-101 would eventually end up at NAS Quonset Point, Rhode Island, and be redesignated Airborne Early Warning Development Squadron Four (VX-4).

May 1947, VX-4 was tasked with the developing airborne early warning systems at Quonset Point, a base both on the front lines of anti-submarine warfare and on the cutting edge research in airborne RADAR and electronics systems. During this period, Fleet Admiral Chester Nimitz, the Chief of Naval Ops, flew on one of the PB-1Ws and was amazed at its capabilities.

The U.S. and Canada teamed to aggressively expand their early warning capabilities as Russia was escalating its nuclear weapons program. The commands would later become Continental Air Defense Command (CONAD), and later, the North American Defense Command (NORAD) of today.

BuNo 77235's first real world missions were flying RADAR picket patrols off of the east coast between Newfoundland and Iceland and around the Azores to extend the coverage of the “Pine Tree Line” along the 50th parallel. VX-4 flew in conjunction with the first two cold war RADAR networks, "Lashup" and "Permanent", and was integral in the nationwide Semi-Automatic Ground Environment (SAGE) air defense system. LASHUP included early warning patrols by Navy RADAR picket destroyer escorts with air search RADAR units and PB-1Ws with look-down RADAR guarding the seaward approaches to the northeastern United States. Later, they would construct the Distant Early Warning (DEW Line), and the Pacific and Atlantic Contiguous Barriers, which would consist of 10 fixed RADAR stations 300NM off of each coast, and all augmented with PB-1Ws.

Another milestone for BuNo 77235 came in April of 1953 when she was the testbed for the first Airborne Moving Target Indication (AMTI), which separates a RADAR target from “clutter”.

VX-4 flew with the tail code “XD”, and it is uncertain which aircraft number BuNo 77235 was assigned while there.

===VX-4 / VW-2===

---End---
VX-4 relocated to NAS Patuxent River, Maryland in 1948. While at “Pax River”, VX-4 was redesignated as Airborne Early Warning Squadron Two, (VW-2) where she still supported the Atlantic fleet. **This is where BuNo. 77235 spent most of her Navy Career.** Airborne Early Warning Squadron One (VW-1) was stood up as the West Coast PB-1W squadron.

Along with early Warning duties, she was tasked with hurricane hunting missions over the Atlantic Ocean. In June 1953, she was overhauled, at the Naval Air Material Center (NAMC) at NAS Norfolk, Virginia and then transferred to VW-1 in February 1954.

---VW-1---

*Her last military assignment was with VW-1 Detachment A, the "Typhoon Trackers" based at NAS Atsugi, on the main island of Japan.* Ironically, this base was built in 1938 by the Japanese Navy to oppose the threat of American bombing raids. Besides AEW and C&C missions, BuNo 77235 flew missions to support the Joint Hurricane Warning Service, gathering weather data on tropical cyclones in the Pacific.

*It is from NAS Atsugi that BuNo. 77235 flew her only combat patrols, supporting Navy Task Force 77 and the forces fighting in the Korean War. She also flew missions to support the DEW (Distant Early Warning) Line,* extending the reach over the Pacific Ocean.

While assigned to VW-1, she was assigned the new tail code of “TE” and was aircraft number 12 (callsign: TE-12 or RAINPROOF 12).

---The End of an Era---

Lack of scalability and lack of a pressurized cabin made the Navy turn to the new Lockheed PO-1W Constellation, later redesignated the WV-1, to replace the PB-1Ws. “Whiskey Victors”, were more comfortable, but the PB-1Ws were considered much more favorable to fly by the pilots. The Connie would carry a crew of 22, had 6,500+ pounds of electronic equipment, and it was alleged to have been able to power a small city.

---Mustered Out---

January 15th 1955, BuNo 77235 was placed in Flyable Storage Status at NAS Litchfield Park, Arizona, (Phoenix Goodyear Airport) until stricken from the books on July 10, 1956. *She was one of the last 20 B-17s built, one of the last B-17s left in U.S. service at the time, and one of only 3 PB-1Ws saved from the scrapyard or scavenging.* She mustered out of the service having well over 3250 hours flying time accrued on the airframe.

*She is currently the only flyable PB-1W, which makes her the oldest AWACS aircraft in the skies, today.*

==From PB-1W to Aerial Surveying==
Aero Service Corporation of Philadelphia bought BuNo 77235 for $17,510.00 on October 1st of 1957. She was civil registered as N7227C, classified as “restricted use” by the F.A.A., and modified for use as a high altitude aerial surveying platform.

A large cargo door was installed on the port side of the aircraft, along with cargo flooring. At different times, N7227C had laser equipment, Doppler radar, a sensor pressure reference unit, blue spectrograph, Fairchild Camera and Instrument KC-4, T-11, and Wild RC-8 type 35mm cameras, a Bell and Howell 11Q strip camera, a gyroscopic camera mount, a magnetometer with a trailing cone probe, a Zenith photometer, and an airborne profile recorder probe in the nose installed. Western Geophysical, a company that specialized in using reflection seismology to explore for petroleum, bought Aero Service Corporation. Western Geophysical was later sold to Litton Industries.

Even though it had changed ownership twice, Aero Service Corporation, renamed ASC Inc, had remained in Philadelphia, and ended up selling N7227C to the Confederate Air Force on September 2, 1967.

==N7227C Joins the Confederate Air Force==

The CAF, then based at Rebel Field in Mercedes, Texas paid ASC Inc. $50,000 for N7227C. N7227C was the first B-17 bought with the sole purpose of being restored as a warbird and maintained as a flying museum piece! At the time, she was white with gray undersides and red striping. She also had a large U.S. flag on the tail. A Confederate States of America Battle Flag was added later.

===Commemorating the 305th Bomb Group Triangle G===

Four Star General Curtis LeMay, former commander of the Strategic Air Command and former Chief of Staff of the USAF, was consulted as to how the CAF’s B-17 should be painted. N7227C was camouflaged painted and with serial 41-24592, and flying in the colors of the 8th Air Force; 1st Bomb Wing/1st Air Division’s; 40th Combat Bombardment Wing; 305th Bombardment Group (Heavy) with the “Triangle G” tail code.

Major LeMay was the commander of the 305th BG (H).

== Commemorating the 88th Reconnaissance Squadron in Tora act ==

In December of 1941, two squadrons of B-17s were stationed in the Philippines when war broke out. The 38th and the 88th Reconnaissance Squadrons, flew 12 B-17s out of Hamilton Army Airfield in California enroute to the Philippines to augment those forces. They were scheduled to land at Hickam AAF, Hawaii on their first hop after flying most of the night, and arrived during the Pearl Harbor attack! On December 7th, land based RADAR operators had mistakenly thought that the Japanese attack force was the flight of B-17s arriving from California since they took the same track of approach. The Japanese attacked the unarmed B-17s that were now very low on fuel. The 12 bombers scattered, landing wherever they could. One opted for a golf course, some recovered at Hickam during the attack, some diverted to Bellows AAF, and others to Haleiwa Fighter Strip.
Texas Raiders has flown with the Tora group since their first show at Scholes Field in Galveston, in May of 1972. While doing the Tora act, Texas Raiders used to come in with smoke trailing from the number 3 engine and had one main landing gear wheel down to simulate a shot up and damaged B-17 trying to get into Hickam AAF during the battle. For many years, CAF “Colonel” Van Skiles would actually touch the one wheel down and fly the length of the runway as had been done in the movie, Tora! Tora! Tora!

=== Commemorating the 381st Bomb Group Triangle L===

It was decided to not commemorate a particular aircraft during her first CAF restoration in the 1960s, so she was named "Texas Raiders" to honor Texas Veterans. Nose art was later applied, consisting of the Texas flag and “Texas Raiders” in white block lettering.

At some point, a scantily clad cowgirl with six-guns in hand, next to a Texas flag replaced the original nose art. A USAF B-1 bomber later copied the name and loosely copied the nose art as well. Texas Raiders has undergone many changes to put her back to B-17G configuration that flew with the U.S.A.A.F. in the European Theater of Operations (ETO)

She was assigned to the Gulf Coast Wing by the CAF in 1972, based at Scholes Field at Galveston, Texas before moving to Ellington Field in Houston. In 1977, the fully operational Sperry ball turret, a mock top turret, and tail gunner’s equipment were installed. Texas Raiders underwent a $300,000 restoration and rebuild project from 1983 to 1986, which saw the cargo door and cargo flooring removed, installing the bomb bay, operating bomb bay doors, and the bombardier’s chin turret. A $180,000.00+ interior overhaul and new paint job was completed in 1993, with the current nose art applied at that time.

Chosen for its colorful red trim, it was decided that Texas Raiders would be painted in the colors of the 8th Air Force, 1st Bomb Wing/1st Air Division; 1st Combat Bombardment Wing; 381st Bombardment Group (Heavy) with their “Triangle L” tail code. She represents the 533rd Bombardment Squadron's plane "hull number" X, and retains her proper Douglas factory serial number, 44-83872.

In 1942, the 381st Bombardment Group was formed at Pyote Air Force Base, Texas which was nicknamed the “Rattlesnake Bomber Base” due to the amount of rattlesnake dens in the area. After training in the U.S., the 381st was assigned to USAAF Station 167, Ridgewell Airfield in Essex, England, where they amassed a very impressive unit history. The 381st would later become the 381st Strategic Missile Wing, maintaining intercontinental ballistic missiles (ICBMs).

The original 381st BG B-17 coded VP-X was Boeing B-17F serial 42-29983, named "Iris", and later named "Uncle Sammy". She was lost on August 17th of 1943.

Douglas built B-17G serial 42-37719 was named “Dinah Mite” for a time and then “Hellcat”. She was lost on January 11th of 1944.
Next came a Vega built B-17G, serial 42-97503, named "Princess Pat". She was listed as salvaged on March 25th of 1945.

The last VP-X was Boeing B-17G serial 43-39300, which retired back to the United States in May of 1945. The 533rd Bomb Squadron’s callsign was “Tabby”, so these aircraft would have been known as “Tabby X-Ray”.

==Current status==

Texas Raiders has finished a lengthy and costly main spar replacement project, started in 2001 due to the Federal Aviation Administration (FAA) Airworthiness Directive # 2001-22-06, citing corrosion in the wings. TR was flown to south Houston's Hobby Airport (KHOU) where she would be based for over 5 years.

After testing, it was determined that Texas Raiders did indeed have corrosion pitting and cracks on the wing root hardware, so replacement parts had to be re-manufactured. It was further decided that since she would be out of service for an extended period that she should be completely refurbished. This project cost well over 500,000 dollars by the time she was airworthy again.

Texas Raiders returned to flight on October 13, 2009, and then debuted on static display at her "home airshow", Wings Over Houston, later that month.

March 2010 found Texas Raiders relocating to a spacious hangar at the Tomball Jet Center at David Wayne Hooks Memorial Airport (KDWH) in Tomball, Texas.

Texas Raiders rejoined the air show circuit in 2010, just in time to commemorate the 75th anniversary of the first flight of the B-17. She has traveled to the world renown Experimental Aircraft Association (EAA) AirVenture Oshkosh airshow, where she was featured in AeroShell Square. She has also participated in the Gathering of 'Fortresses at the Thunder Over Michigan air show, and as a tribute to the unit that she memorializes, appeared at the 381st Bomb Squadron's reunion.

In 2012, she participated in the airshow at Dyess Air Force Base. TR was hosted by the 436th Training Squadron, which is the unit whose linage traces back to the 88th Reconnaissance Squadron that Texas Raiders commemorates while performing in the Tora Tora Tora act.

END OF COMPLETE MANUAL VERSION 3/21/2015