



**NAVY TRAINING SYSTEM PLAN**

**FOR THE**

**C-37A AIRCRAFT**

**N78-NTSP-A-50-0119/A**

**MAY 2003**

## **C-37A AIRCRAFT**

### **EXECUTIVE SUMMARY**

The C-37A Aircraft is being procured for the Naval Reserves using the Department of Defense Economy Act, under an existing United States Air Force contract. The C-37A Aircraft will replace the VP-3A Service Support Aircraft and its worldwide executive transportation mission. The C-37A Aircraft is a derivative of the commercial off-the-shelf Federal Aviation Administration certified Gulfstream V Aircraft manufactured by Gulfstream Aerospace Corporation. The C-37A Aircraft was designated Acquisition Category IV M (Monitored) in December 2000, and is in the Production and Deployment phase of the Defense Acquisition System. Beginning in July 2002, the Navy plans to purchase five C-37A Aircraft to replace the five existing VP-3A Aircraft, which will then be retired from the fleet. The C-37A acquisition will not require Developmental or Operational Testing.

Initially, three C-37A Aircraft were funded and will be delivered to Fleet Logistics Support Squadron One (VR-1) in July 2002, Fiscal Year (FY) 05, and FY07, and will augment two C-20D Aircraft in VR-1. In FY08 and FY09, the two remaining C-37A Aircraft are expected to replace the VP-3A Service Support Aircraft.

VR-1 is a Naval Reserve squadron located at the NAF Washington, D.C. VR-1 is manned with Active Duty (ACDU) and Training and Administration of Naval Reserve (TAR) Pilots and ACDU enlisted aircrew, administrative, and maintenance personnel.

C-37A Aircraft organizational, intermediate, and depot level maintenance will be performed via a contractor logistic support contract. VR-1 Pilot and Aircrew manpower will increase for the C-37A Aircraft, although it can not be quantified at this time. VR-1 manpower will be updated in future iterations of this C-37A Aircraft Navy Training System Plan.

C-37A Aircraft Pilot and Aircrew initial and recurrent training will be conducted by Flight Safety International located in Savannah, Georgia. Initial training began in August 2001.

**C-37A AIRCRAFT**  
**TABLE OF CONTENTS**

	<b>Page</b>	
Executive Summary .....	i	
List of Acronyms .....	iii	
Preface.....	vi	
 <b>PART I - TECHNICAL PROGRAM DATA</b>		
A. Nomenclature-Title-Program .....	I-1	
B. Security Classification.....	I-1	
C. Manpower, Personnel, and Training Principals .....	I-1	
D. System Description.....	I-1	
E. Developmental Test and Operational Test .....	I-2	
F. Aircraft and/or Equipment/System/Subsystem Replaced .....	I-2	
G. Description of New Development.....	I-2	
H. Concepts .....	I-6	
1. Operational.....	I-6	
2. Maintenance.....	I-6	
3. Manning .....	I-8	
4. Training.....	I-8	
I. Onboard (In-Service) Training.....	I-13	
J. Logistics Support.....	I-14	
K. Schedules.....	I-15	
L. Government-Furnished Equipment and Contractor-Furnished Equipment Training Requirements .....	I-16	
M. Related NTSPs and Other Applicable Documents.....	I-16	
 <b>PART II - BILLET AND PERSONNEL REQUIREMENTS</b> .....		II-1
 <b>PART III - TRAINING REQUIREMENTS</b> .....		III-1
 <b>PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS</b> .....		IV-1
 <b>PART V - MPT MILESTONES</b> .....		V-1
 <b>PART VI - DECISION ITEMS/ACTION REQUIRED</b> .....		VI-1
 <b>PART VII - POINTS OF CONTACT</b> .....		VII-1

**LIST OF ACRONYMS**

**C-37A AIRCRAFT**

**LIST OF ACRONYMS**

ACDU	Active Duty
AD	Aviation Machinist's Mate
AE	Aviation Electrician's Mate
AFIS	Airborne Flight Information System
AM	Aviation Structural Mechanic
AME	Aviation Structural Mechanic (Safety Equipment)
AOB	Average Onboard
AT	Aviation Electronics Technician
CFY	Current Fiscal Year
CHNAVPERS	Chief of Naval Personnel
COMLANTFLT	Commander U.S. Atlantic Fleet
COMPACFLT	Commander U.S. Pacific Fleet
CLS	Contractor Logistic Support
CMP	Computerized Maintenance Program
CNO	Chief of Naval Operations
COMBS	Contractor Operated and Maintained Base Supply
COMNAVAIRESFOR	Commander Naval Air Reserve Force
CSO	Flight Communications Operator
DAFCS	Digital Automatic Flight Control System
DoD	Department of Defense
EDS	Electronic Display System
EGPWS	Enhanced Ground Proximity Warning System
EICAS	Engine Indication and Crew Alerting System
EVS	Enhanced Vision System
FAA	Federal Aviation Administration
FADEC	Full Authority Digital Engine Controls
FL	Flight Level
FMS	Flight Management System
FSI	Flight Safety International
FY	Fiscal Year
GAC	Gulfstream Aerospace Corporation
GDC	Global Data Center
GNSSU	Global Navigation Satellite System Unit

**C-37A AIRCRAFT**

**LIST OF ACRONYMS**

GPS	Global Positioning System
HUD	Head-Up Display
INMARSAT	International Marine/Maritime Satellite
MCAS	Marine Corps Air Station
MDAU	Maintenance Data Acquisition Unit
MLS	Microwave Landing System
NA	Not Applicable
NAF	Naval Air Facility
NAS	Naval Air Station
NATOPS	Naval Air Training and Operating Procedures Standardization
NAVAIRSYSCOM	Naval Air Systems Command
NAVMAC	Naval Manpower Analysis Center
NAVPERSCOM	Naval Personnel Command
NEC	Navy Enlisted Classification Code
NETC	Naval Education and Training Command
NTSP	Navy Training System Plan
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Office of the Chief of Naval Operations Instruction
OPO	OPNAV Principal Official
ORD	Operational Requirements Document
PC	Personal Computers
PDA	Principal Developing Agency
PFY	Previous Fiscal Year
PMA	Program Manager, Air
PNEC	Primary Navy Enlisted Classification Code
PQS	Personnel Qualification Standards
RA	Replacement Aircraft
RFT	Ready For Training
SARS	Satellite Aeronautical Radio Telephone System
SATCOM	Satellite Communications

**C-37A AIRCRAFT**

**LIST OF ACRONYMS**

SNEC	Secondary Navy Enlisted Classification Code
SRA	Shop Replaceable Assembly
TAR	Training and Administration of Naval Reserve
TARS	Terrestrial Aeronautical Radio Telephone System
TBD	To Be Determined
TCAS	Traffic Collision Avoidance System
TD	Training Device
TFMMS	Total Force Manpower Management System
TTE	Technical Training Equipment
UHF	Ultra High Frequency
UHFSATCOM	Ultra High Frequency Satellite Communications
VHF	Very High Frequency
VR-1	Fleet Logistics Support Squadron One
WRA	Weapon Replaceable Assembly

## **C-37A AIRCRAFT**

### **PREFACE**

This Approved Navy Training System Plan (NTSP) for the C-37A Aircraft System Plan was written to comply with guidelines set forth in the Navy Training Requirements Documentation Manual, Office of the Chief of Naval Operations (OPNAV) Publication P-751-1-9-97.

This NTSP provides an overview of the C-37A Aircraft program and its concepts for operation, support, manpower, personnel, and training. Since the C-37A Aircraft program is relatively early in the acquisition process, some definitive data was unavailable for inclusion in this version.

This version incorporates comments received from Commander, Fleet Logistics Support Wing. These comments made various corrections of a general nature in the NTSP.

**PART I - TECHNICAL PROGRAM DATA**

**A. NOMENCLATURE-TITLE-PROGRAM**

1. **Nomenclature-Title-Acronym.** C-37A Aircraft
2. **Program Element.** 0204453N

**B. SECURITY CLASSIFICATION**

1. **System Characteristics** ..... Unclassified
2. **Capabilities** ..... Unclassified
3. **Functions** ..... Unclassified

**C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS**

- OPNAV Principal Official (OPO) Program Sponsor ..... CNO (N780G1)
- OPO Resource Sponsor..... CNO (N780G1)
- Developing Agency ..... NAVAIR (PMA207)
- Training Agency ..... COMNAVAIRESFOR
- Training Support Agency..... NAVAIR (PMA205)  
COMNAVAIRESFOR
- Manpower and Personnel Mission Sponsor..... CNO (N12)  
NAVPERSCOM (PERS-4, PERS-404)
- Director of Naval Education and Training ..... CNO (N00T)
- Commander, Naval Air Reserve Program Manager ..... COMNAVAIRESFOR (N36)

**D. SYSTEM DESCRIPTION**

1. **Operational Uses.** The C-37A Aircraft is a commercial off-the-shelf Gulfstream Aerospace Corporation (GAC) Gulfstream V Aircraft. It has been chosen to satisfy the VP-3A Service Support Replacement Aircraft (RA) executive transportation requirement. The requirements for the VP-3A Service Support Aircraft are stated in the Deputy Chief of Naval Operations Baseline Requirements letter, N88061/IOU661310 dated 26 April 2000. The Navy

currently uses five VP-3A Service Support Aircraft to provide unrestricted worldwide executive transportation for the Secretary of the Navy, Chief of Naval Operations, Commandant of the Marine Corps, Commander in Chief United States Naval Forces Europe, Commander in Chief U.S. Atlantic Fleet, Commander in Chief U.S. Pacific Fleet, and distinguished visitors. This mission is essential in wartime when diplomacy and negotiation become critical elements of national security strategy. Mission protocol dictates the use of military and civilian airports worldwide, both United States and foreign.

The current inventory of VP-3A Service Support Aircraft is approaching the end of its service life, and will be retired beginning in Fiscal Year (FY) 02. Currently, three VP-3A Service Support Aircraft are based at Naval Air Station (NAS) Jacksonville, Florida, and one VP-3A Aircraft each at the Naval Air Facility (NAF) Sigonella, Italy, and Marine Corps Air Station (MCAS) Kaneohe Bay, Hawaii. The Navy plans to purchase five C-37A Aircraft beginning in July 2002. The first three C-37A Aircraft will be delivered to Fleet Logistics Support Squadron One (VR-1), NAF Washington, D.C., to augment the C-20D Aircraft. In FY08 and FY09, the two remaining C-37A Aircraft are expected to replace the VP-3A Aircraft at the NAF Sigonella, Italy; MCAS Kaneohe Bay, Hawaii; or NAS Jacksonville.

**2. Foreign Military Sales.** Currently, the Air Force and Army use the Gulfstream V Aircraft, and the Coast Guard is expected to lease a C-37A Aircraft in the near future. The Gulfstream V Aircraft are used by more than 30 government and military services worldwide.

**E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.** The Air Force performed 49 operational test flights to verify system operational suitability and effectiveness. The C-37A Aircraft will be purchased under an existing Air Force contract, designated an Acquisition Category IV M (Monitored) program and thus, no Developmental or Operational Testing will be required.

**F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.** The C-37A Aircraft will replace the VP-3A Service Support executive transport aircraft.

## **G. DESCRIPTION OF NEW DEVELOPMENT**

**1. Functional Description.** The C-37A is a Federal Aviation Administration (FAA) certified, non-developmental item, intercontinental, low volume passenger aircraft. The C-37A Aircraft is a military version of the Gulfstream V commercial jet. A typical C-37A mission will fly high-level government and military personnel and baggage 5,800 nautical miles without refueling. The aircraft is also equipped with both commercial and military communications equipment to provide secure voice and data capability. The C-37A Aircraft is able to carry 12 to 14 passengers and a crew of five. The C-37A Aircraft has the ability to fly in and above the reduced vertical separation minimum designated airspace of 29,000 to 41,000 feet (Flight Level (FL) 290-FL410), with a service ceiling of 51,000 feet (FL510). This allows for enhanced route flexibility while reducing delays due to air traffic control flow restrictions.

**2. Physical Description.** The C-37A is a twin-engine, turbofan aircraft. It is an all-weather aircraft capable of long-range, low or high speed, and high altitude maneuverability. The C-37A Aircraft is capable of cruising at altitudes up to 51,000 feet, above most other air traffic and adverse weather. The aircraft is divided into five sections (excluding cockpit):

- Communications Station
- Principal’s Area (containing two first class seats, one four place divan, and one console)
- Staff Area (containing eight business class seats and four console tables)
- Galley Section (containing the Mess/Flight Safety Specialist jumpseat)
- Baggage Compartment

The C-37A Aircraft physical description and parameters are as follows:

Maximum Range.....	5,800 nautical miles
Maximum Cruise Altitude .....	51,000 feet
Thrust.....	14,464 pounds per engine
Cruising Speed.....	600 miles per hour
Maximum Takeoff Weight .....	90,500 pounds
Maximum Landing Weight.....	75,300 pounds
Maximum Zero Fuel Weight .....	54,500 pounds
Maximum Fuel Weight.....	41,300 pounds
Maximum Payload.....	4,900 pounds
Length.....	96 feet 5 inches
Cabin Length.....	50 feet 1 inches
Height.....	25 feet 10 inches
Cabin Height .....	6 feet 2 inches
Wing Span .....	93 feet 6 inches
Cabin Width.....	7 feet 4 inches
Engines (two).....	BMW/Rolls-Royce BR700-710A1-10

**3. New Development Introduction.** The C-37A Aircraft is being procured using an existing competitive, fixed price, Air Force contract (F33657-96-0037) using the Department of Defense (DoD) Economy Act.

**4. Significant Interfaces.** Not Applicable (NA)

**5. New Features, Configurations, or Material.** The C-37A Aircraft contains the systems described in the following paragraphs.

**a. Traffic Collision Avoidance System.** The Traffic Collision Avoidance System (TCAS) - 2000 warns the Pilot of traffic conflicts and gives guidance to avoid collision. It is a requirement for European airspace operations. The system features enhanced sensitivity and detection range, increased processor speed, and lower weight, while enabling future TCAS upgrades. The TCAS is an instrument integrated into other C-37A systems in the aircraft cockpit. It consists of hardware and software that together provide a set of electronic eyes so

that the Pilot can see the traffic situation in the vicinity of the aircraft. Part of the TCAS capability is a display showing the Pilot the relative positions and velocities of aircraft up to 40 miles away. The instrument sounds an alarm when it determines that another aircraft will pass too closely to the subject aircraft. TCAS provides a backup to the air traffic control system's regular separation processes. The system determines the course of each approaching aircraft, climbing, descending, or flying straight and level. TCAS then issues a resolution advisory advising the Pilot to execute an evasive maneuver necessary to avoid the other aircraft, such as climb or descend.

**b. Enhanced Ground Proximity Warning System.** The Mark V Enhanced Ground Proximity Warning System (EGPWS) is a terrain awareness and warning system incorporating terrain alerting and display functions. These functions use aircraft geographic position, aircraft altitude, and the worldwide terrain mapping database to predict potential conflicts between the aircraft's flight path and terrain and to provide graphic displays on multifunction cockpit displays of the conflicting terrain.

**c. Global Positioning System.** The Global Positioning System (GPS) includes installation of the Global Navigation Satellite System Unit (GNSSU). The GNSSU offers precise position and guidance information and enhanced approach capability using the GPS. The 12-channel receiver tracks all satellites in view, which could be as many as 12, to provide precise position determination. Advanced multiple positions correlator signal processing gives the GNSSU fast satellite acquisition and enhanced satellite tracking capabilities.

**d. Flight Management System.** The C-37A Aircraft incorporates Flight Management System (FMS) FMZ-2000, which provides lateral and vertical navigation guidance for display and coupling to the Digital Automatic Flight Control System (DAFCS). The system provides for high accuracy long-range navigation. The navigation computer connects to the inertial reference system and displays digital information from the C-37A avionics subsystems through an electronic instrument system. It allows the Flight Crew to easily view navigation, weather radar, landing, and other vital flight information via two display units. The FMS is interfaced with the Electronic Display System (EDS). The EDS-884 provides the Flight Crew with complete flight path, navigation, engine, and systems information. Specifically, the EDS displays heading, course, radio bearing, pitch and roll attitude, barometric altitude, calibrated airspeed, selected alert altitude, vertical speed, angle of attack, radio altitude, lateral and vertical deviation, engine parameters, weather advisories, and caution and advisory indications.

**e. Digital Automatic Flight Control System.** The C-37A incorporates the SPZ-8500 DAFCS. The SPZ-8500 provides fail-operational execution of flight director guidance, autopilot, yaw damper, and trim functions. Fail-operational is defined as a fault or failure of a system component that causes an automatic switch to an identical backup component without any interruption in the system operation. Integrated into the SPZ-8500 are the Electronic Flight Instrument System, Engine Indication and Crew Alerting System (EICAS), and the dual FMS. Automatic path mode commands are generated by a flight guidance DAFCS computer, which integrates the attitude and heading reference, air data, weather radar, radio altimeter, EDS, and FMS information into a complete aircraft control system. The system provides the stabilization and control needed to ensure optimum performance throughout the aircraft flight regime. The

SPZ-8500 also includes an integrated, fully functional Head-Up Display (HUD). The HUD system permits landing in difficult near-zero visibility conditions, even at airports with few all-weather approach aids.

**f. Terrestrial Aeronautical Radio Telephone System.** The C-37A Aircraft incorporates the MagnaStar C-2000 Terrestrial Aeronautical Radio Telephone System (TARS). The TARS provides two channels of non-secure digital-voice or facsimile communications. Both channels may be used simultaneously. Direct-dial calls can be made from the aircraft to the ground, and ground to the aircraft. Seamless non-interrupted service with ground-to-air direct dial is also provided.

**g. Satellite Aeronautical Radio Telephone System.** The Satellite Aeronautical Radio Telephone System (SARS), SAT-906-6, will be installed. This system has five full-duplex channels for worldwide non-secure and secure voice communication and one channel for data. The SARS will provide digital communications using International Marine/Maritime Satellite (INMARSAT) nearly worldwide.

**h. Ultra High Frequency Satellite Communications System.** The C-37A Aircraft will be equipped with an Ultra High Frequency Satellite Communications (UHFSATCOM) system. The UHFSATCOM system will provide a high quality, high-speed medium for secure voice, Personal Computer (PC) data, and facsimile communications over both wide-band and narrow-band channels. The embedded cryptograph features provide interoperability with existing military Communications Security devices.

**i. Airborne Flight Information with Very High Frequency Satellite Communications Link.** Airborne Flight Information System (AFIS) messages will be accessible to the flight crew through the FMS Control Display Unit. It will also provide two-way communications to the Global Data Center (GDC), providing information such as weather, flight planning, and flight related messages. The AFIS system communicates with the GDC by either using an internal Very High Frequency (VHF) radio or, in the event that the aircraft is beyond the range of a VHF ground station, by using the data channel of the onboard SATCOM system. The SATCOM system will use INMARSAT from nearly anywhere in the world.

**j. Microwave Landing System.** A dual Honeywell Microwave Landing System (MLS) will be installed. The MLS provides precision guidance capable of satisfying a full range of operational requirements in all weather conditions.

**k. Enhanced Vision System.** The Enhanced Vision System (EVS) uses infrared technology to display real-time, real-world images forward of the aircraft in nearly any weather condition. The EVS improves the Pilot's awareness, particularly in the critical take-off and landing phases of flight and during taxi operations.

**l. Maintenance Data Acquisition Unit.** The Maintenance Data Acquisition Unit (MDAU) collects data from various digitally controlled aircraft systems to help simplify maintenance troubleshooting. The system is also integrated with the dual channel Full Authority Digital Engine Control (FADEC) system. The FADEC system boosts engine reliability by

maintaining critical engine operating parameters. Displayed on EICAS, the system stores faults in non-volatile memory, and allows for “Playback” of faults and stored engine data. The MDAU also provides dispatch status for Master Minimum Equipment List items by time or number of flights remaining.

**m. Other Systems and Components.** Additional C-37A Aircraft systems and components include the installation of the AN/ARN-153 Tactical Air Communication and Navigation, AN/ARC-164 Ultra High Frequency (UHF) Communication, AN/APX-100 Identification Friend or Foe, Emission Control Computers, and the SecuraPlane 500 Aircraft Security system. The communication station contains a security safe, printers, and paper shredding machines.

## H. CONCEPTS

**1. Operational Concept.** The C-37A Aircraft is operated with a crew of five: Pilot, Co-Pilot, Crew Chief, Communications Station Operator, and one Aircrewmen. The C-37A Aircraft also requires a Communications Station Operator. Crew Chiefs will be from the Aviation Machinist’s Mate (AD), Aviation Electrician’s Mate (AE), Aviation Structural Mechanic (Safety Equipment) (AME), Aviation Structural Mechanic (AM), and Aviation Electronics Technician (AT) ratings with Navy Enlisted Classification (NEC) 8245. Aircrewmen Special Assignment personnel, NEC 8202, will perform duties of a C-37A Aircraft Mess/Flight Safety Specialist. Currently, VR-1 and the C-20D/G Aircraft platform do not have this Communications Station Operator position. Operational manning for the C-37A Aircraft Communications Station will be updated in future iterations of this NTSP.

**2. Maintenance Concept.** Concerning the C-37A Aircraft program, the OPNAVINST 4790.2 series is utilized for general policies and reporting procedures only. Organizational maintenance will be provided by contractor personnel at VR-1, NAF Washington, D.C. Overhaul and repair of contractor furnished equipment is handled via FAA approved sources and meets serviceability, inspection criteria, and functional test requirements of the FAA and component manufacturer. When applicable, repaired items will show evidence of FAA certification. The contractor is required to support the operational readiness goal of 85% Full Mission Capable rate.

The C-37A Aircraft will use the existing Contractor Operated and Maintained Base Supply (COMBS) system at NAF Washington. The COMBS system is operated as a Joint Air Force-Navy-Army facility, and is augmented as required to include Navy support requirements. The contractor established and maintains a maintenance data collection system. This system, the GAC Computerized Maintenance Program (CMP), includes on-site Electronic Data Transmittal capability. The government has access capability for review and extraction of the CMP data. The COMBS system also ensures the availability of all support equipment required for aircraft maintenance for the C-37A Aircraft. The C-37A Aircraft maintenance concept is performed in accordance with the requirements and procedures prescribed by GAC, utilizing the CMP.

**a. Organizational.** All C-37A Aircraft organizational level maintenance will be performed under a Contractor Logistic Support (CLS) contract. GAC will provide for all C-37A Aircraft scheduled and unscheduled maintenance.

**(1) Preventive Maintenance.** C-37A Aircraft preventive maintenance consists of standard pre-flight and post-flight inspections, and regular calendar and flight hour corrosion and material inspections, in accordance with requirements and procedures prescribed by GAC maintenance manuals, maintenance review board reports, GAC instructions, CMP, and as directed by Program Manager, Air (PMA207).

**(2) Corrective Maintenance.** C-37A Aircraft corrective maintenance consists of fault isolation to a defective Weapon Replaceable Assembly (WRA) or Shop Replaceable Assembly (SRA), removal and replacement of defective WRAs or SRAs, and verification of the repair using built-in-test equipment, the appropriate test sets, or common support equipment. WRAs and SRAs requiring repair will be forwarded to the appropriate COMBS for replacement or repair.

**b. Intermediate.** C-37A Aircraft intermediate level maintenance will be performed by the contractor in accordance with requirements and procedures prescribed by GAC maintenance manuals, maintenance review board reports, GAC instructions, CMP, and as directed by PMA207.

**c. Depot.** If needed, depot level maintenance or C-37A Aircraft overhaul maintenance will be performed either on-site or at the GAC facility in Savannah, Georgia. Engine depot level maintenance will be performed at the Rolls Royce engine facility located in Canada.

**d. Interim Maintenance.** C-37A Aircraft organizational, intermediate, and depot level maintenance will be performed via a CLS contract. GAC will provide interim contractor support for the first 30 days of the C-37A Aircraft acquisition, with additional 30-day increments available as required until the C-37A Aircraft acquisition is completed. GAC will provide two Systems Specialists to augment a Field Service Representative. Additionally, this interim contractor support will assist with logistic setup and flight, maintenance crew, and Flight Attendant on-the-job training. Technical support from GAC Savannah will also be provided.

**e. Life Cycle Maintenance Plan.** The Standard Depot Level Maintenance-based maintenance philosophy was replaced with the Integrated Maintenance Concept in October 2000. The C-37A Aircraft does not require scheduled depot level maintenance. GAC will perform C-37A Aircraft area inspections in 96-month intervals in accordance with GAC Gulfstream V maintenance manuals. The C-37A Aircraft has an expected life of 20,000 flight hours or twenty years of service. C-37A Aircraft scheduled maintenance includes “A” checks performed every 450 hours, and “C” checks performed every calendar year. The C-37A Aircraft engine mid-life inspection is performed at 3,500 flight hours, and an engine overhaul is performed at 7,000 flight hours.

**3. Manning Concept.** C-37A Aircraft Pilot billets will be manned from the existing VR-1 C-20D/G Active Duty and Training and Administration of Naval Reserve (TAR) Pilot billets with Designator 1310 or 1317. C-37A Aircraft Crew Chief billets will be manned from the existing VR-1 Aircrew pool, NEC 8245 (C-20D/G Crew Chief). The C-37A Aircraft also requires a Communications Station Operator. Currently, VR-1 and the C-20D/G Aircraft platform do not have this Communications Station Operator position. VR-1 and the C-27A Fleet Introduction Team has recommended that the C-37A Aircraft use NEC 8265, P-3/EP-3J Flight Communication Operator personnel to man the Communications Station. The manning concept for the C-37A Aircraft Communications Station will be updated in future iterations of this NTSP.

**a. Estimated Maintenance Man-Hours per Flight Hour.** NA

**b. Proposed Utilization.** The Navy was authorized under the DoD Economy Act to utilize the Air Force Operational Requirements Document (ORD), which states that the C-37A Aircraft utilization rate is 900 flight hours annually.

**c. Recommended Qualitative and Quantitative Manpower Requirements.** Current qualitative and quantitative manpower requirements for VR-1 were extracted from the Total Force Manpower Management System (TFMMS). VR-1 Pilot and Aircrew manpower will increase for the C-37A Aircraft, although it cannot be quantified at this time. There is no C-37A Aircraft-specific Navy Officer Billet Code (NOBC) or NEC.

POSITION	DESIGNATOR OR RATING	NEC	SEAT FACTOR
Pilot/Co-Pilot	1310/1317	NA	2
Crew Chief	AD, AE, AME, AM, AT	8245	1
Aircrewman (Special Assignment)	Determined by Chief of Navy Personnel (CHNAVPERS)	8202	1
Flight Communications Operator	AT	8265	1

**4. Training Concept.** All C-37A Aircraft initial and recurrent Pilot, Aircrew, and Flight Attendant training will be conducted by Flight Safety International (FSI) located in Savannah, Georgia. There will be no Navy organic Pilot, Aircrew, or Flight Attendant follow-on training.

**a. Initial Training.** The C-37A Aircraft will be introduced into the Navy beginning in July 2002. FSI conducts initial training at their facility in Savannah, Georgia. One Pilot attended Gulfstream V Pilot Initial Training in August 2001. The same Pilot attended Gulfstream V Pilot Recurrent Training in third quarter FY02. Three additional Pilots attended Gulfstream V Pilot Initial Training in third quarter FY02, and one will attend in fourth quarter FY02.

C-37A Aircraft Crew Chiefs will attend the FSI Gulfstream V Maintenance Initial Organizational Maintenance Course. Crew Chiefs will also attend Gulfstream V Pilot Recurrent Training annually. The first Crew Chief began the course in first quarter FY02. Two other Crew Chiefs attended training in third quarter FY02.

C-37A Aircraft Flight Communications Operators (CSO) will attend the FSI Cabin Communications Course. The first CSO completed training in first quarter FY02. Additional training has not been determined at this time.

C-37A Aircraft CSOs will attend the FSI Cabin Communications Course. The first CSO completed training in first quarter FY02. Additional training has not been determined at this time

The C-37A Aircraft will also require the use of a Mess/Flight Safety Specialist. VR-1 currently uses NEC 8202, Naval Aircrewman Special Assignment. These individuals will attend a FSI Flight Attendant Training course. Two Mess/Flight Safety Specialists were funded for training; one attended in first quarter FY02 and the other in third quarter FY02.

<b>Title .....</b>	<b>Gulfstream V Pilot Initial Training</b>
Description .....	This course provides training to the first tour C-37A Pilot, including: <ul style="list-style-type: none"> <li>° Flight Training Systems</li> <li>° Avionics and Electrical Systems</li> <li>° Power Plant and Related Systems</li> <li>° Hydraulic and Pneumatic Systems</li> <li>° Communication and Navigation Systems</li> <li>° FMS</li> <li>° TCAS</li> <li>° EGPWS</li> <li>° Egress and Ditching Procedures</li> <li>° Crew Tactics and Safety</li> <li>° Gulfstream V Flight Manual and Naval Air Training and Operating Procedures Standardization (NATOPS) Familiarization</li> </ul> <p>Upon completion, the student will be able to perform as a C-37A Pilot in a squadron environment.</p>
Location .....	FSI, Savannah
Length .....	22 days
RFT date .....	Currently available
Skill identifier .....	Designator 1310 or 1317
TTE/TD .....	Gulfstream V Flight Simulator

- Prerequisites ..... ° E-2D-0039, Survival, Evasion, Resistance, and Escape  
 ° B-322-0041, Refresher Physiology, Tactical Jet Training  
 ° B-9E-1224, Naval Aviation Water Survival Program R-1  
 ° Security Clearance - Secret  
 ° Gulfstream III or IV Pilot Designation

**Title ..... Gulfstream V Pilot Recurrent Training**

Description ..... This course provides training to the recurrent C-37A Pilot or Crew Chief, including:

- ° Aircraft System Normal Operations and Procedures
- ° Emergency and Abnormal Aircraft System Procedures
- ° Weight and Balance
- ° Flight Planning
- ° Egress and Ditching Procedures
- ° Crew Tactics and Safety
- ° Gulfstream V Flight Manual and NATOPS

Upon completion, the student will be able to perform as a C-37A Pilot or Crew Chief in a squadron environment.

Location ..... FSI, Savannah

Length ..... 5 days

RFT date ..... Currently available

Skill identifier ..... Designator 1310 or NEC 8245

TTE/TD ..... Gulfstream V Flight Simulator

- Prerequisites..... ° E-2D-0039, Survival, Evasion, Resistance, and Escape  
 ° B-322-0041, Refresher Physiology, Tactical Jet Training  
 ° B-9E-1224, Naval Aviation Water Survival Program R-1  
 ° Security Clearance - Secret  
 ° Gulfstream Maintenance Initial, NEC 8245

**Title .....** **Gulfstream V Maintenance Initial Training**

Description..... This course provides training to the first tour C-37A enlisted Aircrewman, including:

- System Component Operation, Location, and Characteristics
- Normal Operation
- Routine Servicing Requirements
- Maintenance Practices and Troubleshooting
- Familiarization with Gulfstream V Manuals
- Safety

Upon completion, the student will be able to perform as an entry level C-37A organizational maintenance technician or Crew Chief in a squadron environment under direct supervision.

Location ..... FSI, Savannah

Length..... 20 days

RFT date ..... Currently available

Skill identifier ..... AD, AE, AME, AM, or AT

TTE/TD..... Gulfstream V Flight Simulator

Prerequisite ..... Applicable core and strand “A” schools (See paragraph 4.c. Student Profiles)

**Title .....** **Gulfstream V Flight Attendant Training**

Description ..... This course provides training to the C-37A Aircrewman Special Assignment, including:

- Aircraft Emergency Equipment Use and Procedures
- Emergency Egress Procedures
- Cabin Operation and Service
- Business Protocol
- Galley Familiarization and Food Preparation

Upon completion, the student will be able to perform as a C-37A Mess/Flight Safety Specialist in a squadron environment under limited supervision.

Location ..... FSI, Savannah

Length ..... 5 days

RFT date ..... Currently available

Skill identifier ..... 8202

TTE/TD ..... Gulfstream Cabin Simulator  
 Prerequisite ..... Applicable core and strand “A” schools (See paragraph 4.c. Student Profiles)

**Title ..... Gulfstream V Cabin Communications Training**

Description ..... This course provides training to the C-37A Flight Communications Operator, including:

- Magnastar, Airshow, and Satellite Communications Description, System Operation, Interface Programming, and Troubleshooting
- Troubleshooting to Both Built-In Test Equipment Level and Laptop Interfacing Using Specialized Software
- Securaplane 450-500 Security System Description and Operation

Upon completion, the student will be able to perform as a C-37A Flight Communications Operator in a squadron environment under limited supervision.

Location ..... FSI, Savannah

Length ..... 5 days

RFT date ..... Currently available

Skill identifier ..... AT 8265 (proposed)

TTE/TD ..... Magnastar, Airshow, and Satellite Communications System Mock-up Trainer

Prerequisite ..... ◦ Gulfstream IV or V Avionics Course  
 ◦ Gulfstream V Maintenance Initial Course

**b. Follow-on Training.** There will be no Navy organic Pilot, Aircrew, or Flight Attendant follow-on training.

**c. Student Profiles**

<b>SKILL IDENTIFIER</b>	<b>PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS</b>
1310	◦ Q-2A-0010, Joint T-34C Intermediate Flight Training ◦ Designated Naval Pilot

<b>SKILL IDENTIFIER</b>	<b>PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS</b>
1317	<ul style="list-style-type: none"> <li>° Q-2A-0010, Joint T-34C Intermediate Flight Training</li> <li>° Designated Naval Pilot</li> </ul>
NEC 8202 Source rating as determined by CHNAVPERS	<ul style="list-style-type: none"> <li>° Applicable core and strand “A” school</li> </ul>
AD 8245	<ul style="list-style-type: none"> <li>° C-601-2011, Aviation Machinist’s Mate Common Core Class A1</li> <li>° C-601-2014, Aviation Machinist’s Mate Turbojet Fundamentals Strand Class A1</li> </ul>
AE 8245	<ul style="list-style-type: none"> <li>° C100-2020, Avionics Common Core Class A1</li> <li>° C602-2039, Aviation Electrician’s Mate O Level Strand Class A1</li> </ul>
AME 8245	<ul style="list-style-type: none"> <li>° C602-2033, Aviation Structural Mechanic E (Safety Equipment) Common Core Class A1</li> <li>° C602-2034, Aviation Structural Mechanic E (Safety Equipment) Egress Strand Class A1</li> </ul>
AM 8245	<ul style="list-style-type: none"> <li>° C603-0175, Aviation Structural Mechanic (Structures Hydraulics) Class A1</li> <li>° C603-0176, Aviation Structural Mechanic (Structures Hydraulics) Intermediate Level Strand Class A1</li> </ul>
AT 8245	<ul style="list-style-type: none"> <li>° C-100-2020, Avionics Common Core Class A1</li> <li>° C-100-2018. Avionics Technician O Level Class A1</li> </ul>
AT 8265	<ul style="list-style-type: none"> <li>° C-100-2020, Avionics Common Core Class A1</li> <li>° C-100-2018. Avionics Technician O Level Class A1</li> </ul>

**d. Training Pipelines. NA**

**I. ONBOARD (IN-SERVICE) TRAINING**

**1. Proficiency or Other Training Organic to the New Development**

**a. Maintenance Training Improvement Program. NA**

**b. Aviation Maintenance Training Continuum System. NA**

**2. Personnel Qualification Standards.** Aircrew Personnel Qualification Standards (PQS) will be used to ensure C-37A Aircraft proficiency. The PQS program for Flight Crew personnel is managed by the PQS Development Group (Code 34) of the Naval Education and Training Professional Development and Technology Center, Pensacola, Florida. Specific details concerning the C-37A Aircraft Aircrew PQS are not yet available.

**3. Other Onboard or In-Service Training Packages.** NA

## J. LOGISTICS SUPPORT

### 1. Manufacturer and Contract Numbers

CONTRACT NUMBER	MANUFACTURER	ADDRESS
Air Force F33657-96-C-0037	Gulfstream Aerospace Corporation	P.O. Box 2206 Savannah, GA 31402-2206

**2. Program Documentation.** The C-37A Aircraft program documentation includes:

- VC-X ORD, AMC 003-90-I/II/III, Revision 1, May 1996
- C-37A Aircraft Statement of Work, F34601-97-C-0231, Revision 3, August 2000
- Combined Acquisition Plan/Acquisition Strategy Report, 207-99-003, January 2000
- VP-3A RA for Operational Support Airlift, Service Support Airlift Modernization Document, N880G1/OU661310, April 00.

**3. Technical Data Plan.** All C-37A Aircraft operation and maintenance manuals will be commercial publications. These technical manuals will meet military requirements and restrictions. These publications will be obtained when the aircraft are purchased. GAC will be responsible to update the C-37A Aircraft publications. All technical drawings on the C-37A Aircraft are maintained in a central library at GAC. The C-37A Aircraft Fleet Introduction Team is currently working with GAC developing a Navy C-37A Aircraft NATOPS manual.

**4. Test Sets, Tools, and Test Equipment.** GAC is contracted to provide all C-37A Aircraft peculiar test sets and test equipment. The COMBS contractor is responsible for establishing a maintenance schedule and performing periodic maintenance and calibration of all C-37A Aircraft Peculiar Support Equipment.

**5. Repair Parts.** C-37A Aircraft repair parts will be provided through a COMBS/Supply concept. The contractor is responsible for receiving, acceptance inspection, stocking, issuing, warranty, repair, and shipment of all parts, components, and peculiar support equipment in the inventory. The Navy will procure initial peculiar spares and support

equipment, which will be maintained by the contractor. GAC will provide an inventory of spares for C-37A Aircraft engines, auxiliary power units, and associated support equipment. GAC, located in Savannah, will serve as a backup for C-37A Aircraft COMBS. Repairs to all components are accomplished at a licensed FAA repair facility and will comply with FAA commercial aircraft requirements. GAC will provide supply technicians at NAF Washington.

**6. Human Systems Integration.** The Navy C-37 is a commercial derivative aircraft that was designed many years ago. The mission has not changed. There is no information available through this Command to verify that the initial design process included human performance issues, although the individual HSI domains were undoubtedly subject to analysis to some extent. It is not anticipated that the existing airframe will be modified to the extent that an HSI program will be required/instituted. Addressing HSI factors at this time for the C-37 airframe will not influence or change any design feature. No human factors issues have been identified by user Commands.

The C-37 is not taught at an in-house Navy school; a commercial contractor is used to teach both aircrew and maintenance personnel. At this time, no information from the Fleet Logistics Support Wing has been received that indicates that graduates from the contractor training have been inadequately trained. There have been no readiness issues with aircraft availability that have been directly tied to personnel training. Although course graduation is one of the requirements to award C-37 NECs, there is a period of OJT required where the student must demonstrate competence. The NEC is then awarded at the conclusion of this OJT period. A process will, however, be put in place where the wing will provide periodic feedback concerning the quality of training provided.

Environmental and Occupational Safety and Health requirements meet federal, state, and local standards, regulations, and directives and are enforced by respective agencies, as applicable

**K. SCHEDULES.** Initial Operational Capability will be achieved when VR-1 receives the first C-37A Aircraft. At this time, the final C-37A Aircraft is expected to be received in FY09.

**1. Installation and Delivery Schedules.** Currently, there is funding for three C-37A Aircraft. The goal is to purchase a total of five C-37A Aircraft to replace the five existing VP-3A Service Support Aircraft in the future. The following table depicts the C-37A Aircraft delivery schedule. Indications are that the fourth and fifth C-37A Aircraft (166378 and 166379) will be stationed at Sigonella, Italy; Kaneohe Bay, Hawaii; or Jacksonville, Florida. These bases currently have the VP-3A Service Support Aircraft assigned.

<b>C-37A AIRCRAFT DELIVERY SCHEDULE</b>		
<b>SERIAL NUMBER</b>	<b>ACTIVITY/LOCATION</b>	<b>FY</b>
166375	VR-1, NAF Washington	FY02

<b>C-37A AIRCRAFT DELIVERY SCHEDULE</b>		
<b>SERIAL NUMBER</b>	<b>ACTIVITY/LOCATION</b>	<b>FY</b>
166376	VR-1, NAF Washington	FY05
166377	VR-1, NAF Washington	FY07
166378	NAF Sigonella, Italy, or NAS Jacksonville	FY08
166379	MCAS Kaneohe Bay or NAS Jacksonville	FY09

**2. Ready For Operational Use Schedule.** All C-37A Aircraft are considered Ready For Operational Use upon receipt and checkout of the aircraft and associated systems.

**3. Time Required to Install at Operational Sites.** NA

**4. Foreign Military Sales and Other Source Delivery Schedule.** NA

**5. Training Device and Technical Training Equipment Delivery Schedule.** C-37A Aircraft Training Device (TD) and Technical Training Equipment (TTE) are owned, maintained, and updated by FSI and GAC.

**L. GOVERNMENT-FURNISHED EQUIPMENT AND CONTRACTOR-FURNISHED EQUIPMENT TRAINING REQUIREMENTS.** NA

**M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS**

<b>DOCUMENT OR NTSP TITLE</b>	<b>DOCUMENT OR NTSP NUMBER</b>	<b>PDA CODE</b>	<b>STATUS</b>
Combined Acquisition Plan/Acquisition Strategy Report	207-99-003	PMA207	Approved Mar 00
VP-3A Replacement Aircraft for Operational Support Airlift, Service Support Airlift Modernization	N880G1/OU661310	PMA207	Approved Apr 00
VC-X Operational Requirements	AMC 003-90-I/II/III	Air Force	Draft Jan 00

<b>DOCUMENT OR NTSP TITLE</b>	<b>DOCUMENT OR NTSP NUMBER</b>	<b>PDA CODE</b>	<b>STATUS</b>
C-37A Aircraft Statement of Work	F34601-97-C-0231	Air Force	Approved Dec 96
Gulfstream Completion Specification	608075G-3	GAC Savannah	Approved Jun 01
C-20D/G Aircraft NTSP	A-50-9306A/A	PMA207	Approved Apr 03

## **PART II - BILLET AND PERSONNEL REQUIREMENTS**

The following elements are not affected by the C-26A Aircraft, and, therefore, are not included in Part II of this NTSP:

- II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule
- II.A.2.b. Billets to be Deleted in Operational and Fleet Support Activities
- II.A.2.c. Total Billets to be Deleted in Operational and Fleet Support Activities
- II.A.3. Training Activities Instructor and Support Billet Requirements
- II.A.4. Chargeable Student Billet Requirements
- II.B. Personnel Requirements
  - II.B.1. Annual Training Input Requirements

**PART II - BILLET AND PERSONNEL REQUIREMENTS**

**II.A. BILLET REQUIREMENTS**

**II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE**

**SOURCE:** Total Force Manpower Management System

**DATE:** 08/2001

<b>ACTIVITY</b>	<b>UIC</b>	<b>PFYs</b>	<b>CFY01</b>	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>
OPERATIONAL ACTIVITIES - NAVY							
VR-1, NAF Washington D.C.	42884	1	0	0	0	0	0
<b>TOTAL:</b>		1	0	0	0	0	0

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS		DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
	OFF	ENL			
OPERATIONAL ACTIVITIES - NAVY					
<b>VR-1, NAF Washington D.C., 42884</b>					
ACDU	3	0	1310		
	1	0	1317		
	1	0	6330		
	0	2	AD1		
	0	1	AD2		
	0	1	AD3		
	0	2	ADAN		
	0	1	AEC		
	0	1	AE1		
	0	2	AE2		
	0	1	AE3		
	0	1	AK1		
	0	1	AK2		
	0	1	AK3		
	0	2	AM1		
	0	2	AM2		
	0	3	AM3		
	0	1	AME2		
	0	1	AME3		
	0	1	APOCS		
	0	4	APOC		
	0	2	APO1		
	0	5	APO1	8245	
	0	1	APO2		
	0	1	APO2	8245	
	0	2	AT1		
	0	1	AT2		
	0	1	AT3		
	0	1	AZ2		
	0	3	AZ3		
	0	1	MSC	8202	
	0	1	MS1	8202	
	0	4	MS2	8202	
	0	1	PR1		
	0	1	PR3		
	0	1	YN1		9588
	0	1	YN3		
	0	1	YNSN		
TAR	9	0	1310		
	0	1	AZ2		
	0	1	AZ2	6315	
<b>ACTIVITY TOTAL:</b>	<b>14</b>	<b>58</b>			

**Note:** These are current billet requirements for the C-20D Aircraft. When new requirements for the C-37A Aircraft are developed, these requirements will be included in future updates to this NTSP.

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NAVY OPERATIONAL ACTIVITIES - ACDU													
1310		3		0		0		0		0		0	
1317		1		0		0		0		0		0	
6330		1		0		0		0		0		0	
AD1			2		0		0		0		0		0
AD2			1		0		0		0		0		0
AD3			1		0		0		0		0		0
ADAN			2		0		0		0		0		0
AEC			1		0		0		0		0		0
AE1			1		0		0		0		0		0
AE2			2		0		0		0		0		0
AE3			1		0		0		0		0		0
AK1			1		0		0		0		0		0
AK2			1		0		0		0		0		0
AK3			1		0		0		0		0		0
AM1			2		0		0		0		0		0
AM2			2		0		0		0		0		0
AM3			3		0		0		0		0		0
AME2			1		0		0		0		0		0
AME3			1		0		0		0		0		0
APOCS			1		0		0		0		0		0
APOC			4		0		0		0		0		0
APO1			2		0		0		0		0		0
APO1	8245		5		0		0		0		0		0
APO2			1		0		0		0		0		0
APO2	8245		1		0		0		0		0		0
AT1			2		0		0		0		0		0
AT2			1		0		0		0		0		0
AT3			1		0		0		0		0		0
AZ2			1		0		0		0		0		0
AZ3			3		0		0		0		0		0
MSC	8202		1		0		0		0		0		0
MS1	8202		1		0		0		0		0		0
MS2	8202		4		0		0		0		0		0
PR1			1		0		0		0		0		0
PR3			1		0		0		0		0		0
YN1	9588		1		0		0		0		0		0
YN3			1		0		0		0		0		0
YNSN			1		0		0		0		0		0
NAVY OPERATIONAL ACTIVITIES - TAR													
1310		9		0		0		0		0		0	
AZ2			1		0		0		0		0		0
AZ2	6315		1		0		0		0		0		0

**II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES**

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs		CFY01		FY02		FY03		FY04		FY05	
		OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
<b>SUMMARY TOTALS:</b>													
NAVY OPERATIONAL ACTIVITIES - ACDU													
		5	56	0	0	0	0	0	0	0	0	0	0
NAVY OPERATIONAL ACTIVITIES - TAR													
		9	2	0	0	0	0	0	0	0	0	0	0
<b>GRAND TOTALS:</b>													
NAVY - ACDU													
		5	56	0	0	0	0	0	0	0	0	0	0
NAVY - TAR													
		9	2	0	0	0	0	0	0	0	0	0	0

**II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS**

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY01		FY02		FY03		FY04		FY05	
				+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM

**a. OFFICER - USN**

Operational Billets ACDU and TAR

1310			12	0	12	0	12	0	12	0	12	0	12
1317			1	0	1	0	1	0	1	0	1	0	1
6330			1	0	1	0	1	0	1	0	1	0	1

**TOTAL USN OFFICER BILLETS:**

Operational			14	0	14	0	14	0	14	0	14	0	14
-------------	--	--	----	---	----	---	----	---	----	---	----	---	----

**b. ENLISTED - USN**

Operational Billets ACDU and TAR

AD1			2	0	2	0	2	0	2	0	2	0	2
AD2			1	0	1	0	1	0	1	0	1	0	1
AD3			1	0	1	0	1	0	1	0	1	0	1
ADAN			2	0	2	0	2	0	2	0	2	0	2
AEC			1	0	1	0	1	0	1	0	1	0	1
AE1			1	0	1	0	1	0	1	0	1	0	1
AE2			2	0	2	0	2	0	2	0	2	0	2
AE3			1	0	1	0	1	0	1	0	1	0	1
AK1			1	0	1	0	1	0	1	0	1	0	1
AK2			1	0	1	0	1	0	1	0	1	0	1
AK3			1	0	1	0	1	0	1	0	1	0	1
AM1			2	0	2	0	2	0	2	0	2	0	2
AM2			2	0	2	0	2	0	2	0	2	0	2
AM3			3	0	3	0	3	0	3	0	3	0	3
AME2			1	0	1	0	1	0	1	0	1	0	1
AME3			1	0	1	0	1	0	1	0	1	0	1
APOCS			1	0	1	0	1	0	1	0	1	0	1
APOC			4	0	4	0	4	0	4	0	4	0	4
APO1			2	0	2	0	2	0	2	0	2	0	2
APO1	8245		5	0	5	0	5	0	5	0	5	0	5
APO2			1	0	1	0	1	0	1	0	1	0	1
APO2	8245		1	0	1	0	1	0	1	0	1	0	1
AT1			2	0	2	0	2	0	2	0	2	0	2
AT2			1	0	1	0	1	0	1	0	1	0	1
AT3			1	0	1	0	1	0	1	0	1	0	1
AZ2			2	0	2	0	2	0	2	0	2	0	2
AZ2	6315		1	0	1	0	1	0	1	0	1	0	1
AZ3			3	0	3	0	3	0	3	0	3	0	3
MSC	8202		1	0	1	0	1	0	1	0	1	0	1
MS1	8202		1	0	1	0	1	0	1	0	1	0	1
MS2	8202		4	0	4	0	4	0	4	0	4	0	4
PR1			1	0	1	0	1	0	1	0	1	0	1
PR3			1	0	1	0	1	0	1	0	1	0	1

**II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS**

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY01		FY02		FY03		FY04		FY05	
				+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM
YN1		9588	1	0	1	0	1	0	1	0	1	0	1
YN3			1	0	1	0	1	0	1	0	1	0	1
YNSN			1	0	1	0	1	0	1	0	1	0	1

**TOTAL USN ENLISTED BILLETS:**

Operational			58	0	58	0	58	0	58	0	58	0	58
-------------	--	--	----	---	----	---	----	---	----	---	----	---	----

**c. OFFICER - USMC** Not Applicable

**d. ENLISTED - USMC** Not Applicable

## **PART III - TRAINING REQUIREMENTS**

The following elements are not affected by the C-37A Aircraft and, therefore, are not included in Part III of this NTSP:

### III.A.2. Follow-on Training

III.A.2.a. Existing Courses

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

### III.A.3. Existing Training Phased Out

**PART III - TRAINING REQUIREMENTS**

**III.A.1. INITIAL TRAINING REQUIREMENTS**

**COURSE TITLE:** Gulfstream V Pilot Initial Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 22 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS			CIV	
		OFF	ENL			
Savannah, Georgia	Aug 01	1	0	0	0	Input
		0.1	0			AOB
		0	0			Chargeable

**COURSE TITLE:** Gulfstream V Pilot Initial Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 22 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS			CIV	
		OFF	ENL			
Savannah, Georgia	Apr 02	1	0	0	0	Input
		0.1	0			AOB
		0	0			Chargeable

**COURSE TITLE:** Gulfstream V Pilot Initial Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 22 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS			CIV	
		OFF	ENL			
Savannah, Georgia	May 02	2	0	0	0	Input
		0.1	0			AOB
		0	0			Chargeable

**COURSE TITLE:** Gulfstream V Pilot Recurrent Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 5 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS			CIV	
		OFF	ENL			
Savannah, Georgia	Jun 02	1	1	0	0	Input
		0	0			AOB
		0	0			Chargeable

**III.A.1. INITIAL TRAINING REQUIREMENTS**

**COURSE TITLE:** Gulfstream V Pilot Recurrent Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 5 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS		CIV	
		OFF	ENL		
Savannah, Georgia	May 03	3	3	0	Input
		0	0		AOB
		0	0		Chargeable

**COURSE TITLE:** Gulfstream V Maintenance Initial Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 20 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS		CIV	
		OFF	ENL		
Savannah, Georgia	Oct 01	0	1	0	Input
		0	0.1		AOB
		0	0		Chargeable

**COURSE TITLE:** Gulfstream V Maintenance Initial Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 20 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS		CIV	
		OFF	ENL		
Savannah, Georgia	Apr 02	0	2	0	Input
		0	0.1		AOB
		0	0		Chargeable

**COURSE TITLE:** Gulfstream V Flight Attendant Initial Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 5 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS		CIV	
		OFF	ENL		
Savannah, Georgia	Nov 01	0	1	0	Input
		0	0		AOB
		0	0		Chargeable

**III.A.1. INITIAL TRAINING REQUIREMENTS**

**COURSE TITLE:** Gulfstream V Flight Attendant Initial Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 5 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS			
		OFF	ENL	CIV	
Savannah, Georgia	Jun 02	0	1	0	Input
		0	0		AOB
		0	0		Chargeable

**COURSE TITLE:** Gulfstream V Cabin Communications Training  
**COURSE DEVELOPER:** Flight Safety International  
**COURSE INSTRUCTOR:** Flight Safety International  
**COURSE LENGTH:** 5 Days  
**ACTIVITY DESTINATIONS:** VR-1, NAF Washington, D.C.

LOCATION, UIC	BEGIN DATE	STUDENTS			
		OFF	ENL	CIV	
Savannah, Georgia	TBD	3	0		Input
		0	0		AOB
		0	0		Chargeable

## PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the C-37A Aircraft and, therefore, are not included in Part IV of this NTSP:

### IV.A. Training Hardware

#### IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

### IV.B.2. Curricula Materials and Training Aids

### IV.B.3. Technical Manuals

### IV.C. Facility Requirements

#### IV.C.1. Facility Requirements Summary (Space/Support) by Activity

#### IV.C.2. Facility Requirements Detailed by Activity and Course

#### IV.C.3. Facility Project Summary by Program

**Note 1:** Training hardware and courseware materials are provided by Flight Safety International. The contractor is responsible for each course, and all training is accomplished at the contractor's facility. For information regarding Training Devices, contact Flight Safety International Learning Center located in Savannah, Georgia.

**Note 2:** Flight simulators are certified by the Flight Standards District Office. This certification is done with the criteria set forth in Advisory Circular (AC) 120-45A, Airplane Flight Training Device Qualification.

**PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS**

**IV.B.1. TRAINING SERVICES**

<b>COURSE / TYPE OF TRAINING</b>	<b>SCHOOL LOCATION, UIC</b>	<b>NO. OF PERSONNEL</b>	<b>MAN WEEKS REQUIRED</b>	<b>DATE BEGIN</b>
Gulfstream V Pilot Initial Training	Savannah, Georgia	2	6.4	May 02
Gulfstream V Pilot Initial Training	Savannah, Georgia	2	6.4	Apr 02
Gulfstream V Pilot Initial Training	Savannah, Georgia	2	6.4	Aug 01
Gulfstream V Pilot Recurrent Training	Savannah, Georgia	2	2	May 03
Gulfstream V Pilot Recurrent Training	Savannah, Georgia	2	2	Jun 02
Gulfstream V Maintenance Initial Training	Savannah, Georgia	2	6.4	Apr 02
Gulfstream V Maintenance Initial Training	Savannah, Georgia	2	6.4	Oct 01
Gulfstream V Cabin Communications Training	Savannah, Georgia	2	2	TBD
Gulfstream V Flight Attendant Initial Training	Savannah, Georgia	2	2	Jun 02
Gulfstream V Flight Attendant Initial Training	Savannah, Georgia	2	2	Nov 01



## PART V - MPT MILESTONES

<b>COG CODE</b>	<b>MPT MILESTONES</b>	<b>DATE</b>	<b>STATUS</b>
CNO	Promulgated the Requirement to Replace the VP-3A Aircraft	Apr 00	Completed
PDA	Approved C-37A Aircraft Acquisition Plan	Dec 00	Completed
PDA	Awarded C-37A Aircraft Contract to GAC	Dec 00	Completed
TSA	Began C-37A Aircraft VR-1 Pilot Initial Training	Aug 01	Completed
TSA	Developed C-37A Aircraft Draft NTSP	Sep 01	Completed
TSA	Developed Proposed NTSP	Jun 02	Completed
PDA	Deliver First C-37A Aircraft to VR-1	Jul 02	Completed
CNO	Approve NTSP	May 03	Completed
PDA	Deliver Second C-37A Aircraft to VR-1	Jul 05	Pending
PDA	Deliver Third C-37A Aircraft to VR-1	Jul 07	Pending



**PART VI - DECISION ITEMS / ACTION REQUIRED**

<b>DECISION ITEM OR ACTION REQUIRED</b>	<b>COMMAND ACTION</b>	<b>DUE DATE</b>	<b>STATUS</b>
Decision concerning manning the C-37A Aircraft Cabin Communications Station		Jul 02	Complete
Funding approval for the final two C-37A Aircraft and their destinations		TBD	Pending



## PART VII - POINTS OF CONTACT

### NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

### TELEPHONE NUMBERS

**CAPT John Chase**

Deputy Aviation Maintenance Programs  
CNO, N781B  
john.chase@navy.mil

**COMM:** (703) 604-7747  
**DSN:** 664-7747  
**FAX:** (703) 604-6972

**CDR Wanda Janus**

Resource Sponsor / Program Sponsor  
CNO, N785D1/E1  
wanda.janus@navy.mil

**COMM:** (703) 614-3375  
**DSN:** 224-3375  
**FAX:** (703) 695-3066

**MAJ Tony Howard**

C-37A Resource Sponsor  
CNO, N780G1  
tony.howard@navy.mil

**COMM:** (703) 693-2933  
**DSN:** 225-2933  
**FAX:** (703) 695-1247

**CAPT Terry Merritt**

Professional Development Division Director  
CNO, N00T3  
terry.merritt@navy.mil

**COMM:** (703) 602-5172  
**DSN:** 227-5172  
**FAX:** (703) 602-5175

**AZCS Gary Greenlee**

NTSP Manager  
CNO, N789H7  
gary.greenlee@navy.mil

**COMM:** (703) 604-7709  
**DSN:** 664-7709  
**FAX:** (703) 604-6939

**LCDR Matthew Browning**

C-37A Aviation Technical Training Manager  
CNO, N789H4  
matthew.browning@navy.mil

**COMM:** (703) 604-7739  
**DSN:** 664-7739  
**FAX:** (703) 604-6969

**Mr. Robert Zweibel**

Human Performance and Acquisition Assessment Division  
CNO, N00T46  
robert.zweibel@navy.mil

**COMM:** (703) 602-5151  
**DSN:** 332-5151  
**FAX:** (703) 602-5175

**LCDR Jim Arend**

Aviation Manpower  
CNO, N122C1C  
n122c1c@bupers.navy.mil

**COMM:** (703) 695-3223  
**DSN:** 225-3223  
**FAX:** (703) 614-5308

**CAPT Michael Fralen**

C-37A Program Manager  
NAVAIR, PMA207  
fralenmc@navair.navy.mil

**COMM:** (301) 757-8574  
**DSN:** 757-8574  
**FAX:** (301) 342-0965

**CDR Duane Mallicoat**

C-37A VR Principal Deputy Program Manager  
NAVAIR, PMA207M  
mallicoatdw@navair.navy.mil

**COMM:** (301) 757-8535  
**DSN:** 757-8535  
**FAX:** (301) 342-0961



## PART VII - POINTS OF CONTACT

### NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

### TELEPHONE NUMBERS

**LCDR Lawrence McCabe**

C-37A Deputy Program Manager  
NAVAIR, PMA207.2  
mccabelc@navair.navy.mil

**COMM:** (301) 757-8554  
**DSN:** 757-8554  
**FAX:** (301) 342-3965

**Mr. Mike Mancini**

C-37A Assistant Program Manager for Training Systems  
NAVAIR, PMA205-3A  
mancinimg@navair.navy.mil

**COMM:** (301) 757-1022  
**DSN:** 757-1022  
**FAX:** (301) 757-4569

**Mr. Greg Page**

C-37A Assistant Program Manager, Engineering  
NAVAIR, PMA207.2E3  
pagegw@navair.navy.mil

**COMM:** (301) 757-9682  
**DSN:** 757-9682  
**FAX:** (301) 342-3965

**Mr. Oral John**

C-37A Assistant Program Manager, Logistics  
NAVAIR, PMA207.2L2  
johnow@navair.navy.mil

**COMM:** (301) 757-8559  
**DSN:** 757-8559  
**FAX:** (301) 342-3965

**Mrs. Donna Peacher**

C-37A Integrated Program Team Lead  
NAVAIR, PMA207.7B  
peacherd@navair.navy.mil

**COMM:** (301) 757-8555  
**DSN:** 757-8555  
**FAX:** (301) 342-3965

**CDR Mike Hohl**

Aviation NTSP Point of Contact  
COMLANTFLT, N71  
hohlmj@clf.navy.mil

**COMM:** (757) 836-0085  
**DSN:** 836-0085  
**FAX:** (757) 836-6737

**CAPT Pat Salsman**

Branch Head, Training Requirements and Assessments  
COMLANTFLT, N72  
salsmancp@clf.navy.mil

**COMM:** (757) 836-6495  
**DSN:** 836-6495  
**FAX:** (757) 836-6737

**Mr. Bob Long**

Deputy Director for Training  
COMPACFLT, N70  
u70@cpf.navy.mil

**COMM:** (808) 471-8513  
**DSN:** 471-8513  
**FAX:** (808) 471-8596

**CDR Rey Consunji**

VR Program Manager  
COMNAVAIRESFOR, N36  
aim36@cnarf.nola.navy.mil

**COMM:** (504) 678-1379  
**DSN:** 678-1379  
**FAX:** (504) 678-1466

**ATCS Philip Hester**

C-37A Training Programs  
COMNAVAIRESFOR, N7  
hesterpo@cnrf.navy.mil

**COMM:** (504) 678-6457  
**DSN:** 678-6457  
**FAX:** (504) 678-1466

**MSGT Kevin Elliott**

C-37A Class Desk  
COMNAVAIRESFOR  
elliottkw@cnrf.navy.mil

**COMM:** (504) 678-5976  
**DSN:** 678-5976  
**FAX:** (504) 678-1466



## PART VII - POINTS OF CONTACT

### NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

### TELEPHONE NUMBERS

**ATC Keith Barbazon**

Air Training Programs  
COMNAVRESFORCOM, N734  
barbazon@cnrf.navy.mil

**COMM:** (504) 678-1259  
**DSN:** 678-1259  
**FAX:** (504) 678-6847

**CAPT Robert Holland**

Deputy Assistant, Chief of Naval Personnel for Distribution  
NAVPERSCOM, PERS-4B  
p4b@persnet.navy.mil

**COMM:** (901) 874-3529  
**DSN:** 882-3529  
**FAX:** (901) 874-2606

**CDR Dave Nelson**

Branch Head, Aviation Enlisted Assignments  
NAVPERSCOM, PERS-404  
p404@persnet.navy.mil

**COMM:** (901) 874-3691  
**DSN:** 882-3691  
**FAX:** (901) 874-2642

**CDR Rose Wynne**

Aviation Department Head  
NAVMAC, 30  
rosemary.wynne@navy.mil

**COMM:** (901) 874-6218  
**DSN:** 882-6218  
**FAX:** (901) 874-6471

**Ms. Susan Webb**

NTSP Coordinator  
NAVMAC, 30  
susan.webb@navy.mil

**COMM:** (901) 874-6242  
**DSN:** 882-6242  
**FAX:** (901) 874-6471

**Mr. Brett Hollowell**

NETC/NPDC NTSP Coordinator  
NPDC, N7  
brett.hollowell@cnet.navy.mil

**COMM:** (757) 444-2269 ext. 3225  
**DSN:** 564-2269 ext. 3225  
**FAX:** (757) 445-8082

**Mr. Steve Berk**

NTSP Distribution  
NETC, ETS-23  
stephen-g.berk@cnet.navy.mil

**COMM:** (850) 452-8919  
**DSN:** 922-8919  
**FAX:** (850) 452-4853

**CDR Janet Wiley**

Center for Naval Aviation Technical Training (CNATT)  
Functional Integration Directorate (FID), N51  
cdr-janet.wiley@cnet.navy.mil

**COMM:** (850) 452-7146  
**DSN:** 922-7146  
**FAX:** (850) 452-7149

**MAJ Robert J. Turpin, USMC**

Center for Naval Aviation Technical Training (CNATT)  
Functional Integration Directorate (FID), N55  
maj-robert.turpin@cnet.navy.mil

**COMM:** (850) 452-7147  
**DSN:** 922-7147  
**FAX:** (850) 452-7149

**LCDR Rick Lawson**

NTSP Manager  
COMOPTEVFOR, 533  
lawsonr@cotg.navy.mil

**COMM:** (757) 444-5087 ext. 3354  
**DSN:** 564-5087 ext. 3354  
**FAX:** (757) 444-3820

**LCDR Tony Pucciarella**

C-37A Fleet Introduction Team  
VR-1  
pucciarellaaj@nafwash.navy.mil

**COMM:** (240) 857-3051  
**DSN:** 857-3051  
**FAX:** (240) 857-7046



## PART VII - POINTS OF CONTACT

### NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL

### TELEPHONE NUMBERS

**AMCS Craig Valois**

C-37A Fleet Introduction Team  
VR-1  
valoisc@nafwash.navy.mil

**COMM:** (240) 857-3051  
**DSN:** 857-3051  
**FAX:** (240) 857-7046

**Mr. Craig Aldrich**

Gulfstream V Maintenance Training Coordinator  
Flight Safety International, Savannah  
aldrichc@fsi007.flightsafety.com

**COMM:** (912) 644-1007  
**DSN:** NA  
**FAX:** (912) 644-1085

**Ms. Lori Harvey**

Gulfstream V Pilot and Aircrew Training Coordinator  
Flight Safety International, Savannah  
lori.anne.harvey@flightsafety.com

**COMM:** (912) 644-1013  
**DSN:** NA  
**FAX:** (912) 644-1085

**PRCS Michael Del Rio**

CFLSW Training LCPO  
CFLSW  
flswtrn@cnrf.navy.mil

**COMM:** (817)-782-7800 x520  
**DSN:** 739-7800 x520  
**FAX:** (817)-782-5595

**Mr. Phil Szczyglowski**

Manpower and Training Analysis Division Head  
NAVAIR, AIR 3.4.1  
szczyglowspr@navair.navy.mil

**COMM:** (301) 757-8280  
**DSN:** 757-8280  
**FAX:** (301) 342-7737

**Mr. Bob Kresge**

NTSP Manager  
NAVAIR, AIR 3.4.1  
kresgerj@navair.navy.mil

**COMM:** (301) 757-1844  
**DSN:** 757-1844  
**FAX:** (301) 342-7737

**ATCS Jeff Hall**

NTSP Coordinator  
NAVAIR, AIR 3.4.1  
halljd3@navair.navy.mil

**COMM:** (301) 757-3109  
**DSN:** 757-3109  
**FAX:** (301) 342-7737