

## **“WINGS OF GOLD”**

### UNITED STATES MARINE CORPS FLIGHT TRAINING OVERVIEW

Upon completion of The Basic School in Quantico, Virginia, you will receive orders to NAS Pensacola where you will report to the Commanding Officer of the Marine Aviation Training Support Group (MATSG). They will handle all of your administrative and pay matters throughout your aviation training. The first two (2) days will be spent “checking-in” at MATSG.

You will receive a date for a flight physical at the Naval Aviation Medicine Institute, or N.A.M.I. This physical will be identical to the physical you took to be approved for any of the Marine Corps guaranteed flight programs. From there you will report back to MATSG for a starting date to Aviation Indoctrination, or A.I., which is located across the street at the Navy Schools Command. At this point you have finally started flight school, although you will have approximately ten (10) weeks before you actually get into the air.

You’ve already started your first week at A.I. by completing your flight physical. The week concludes with indoctrination to the Navy Schools Command on Wednesday and Thursday, as well as a run of the O-Course and C-Course (1.6 mile run) on Thursday and Friday.

For the first three weeks of A.I. you will be taking a concentrated academic load consisting of: 1. Aerodynamics (Basic Principals of Flight), 2. Engines (Jet and Reciprocating), 3. Navigation, and additional course on Aviation Flight Physiology (Effects of Flight on the Human Body). Your overall standing in A.I. will be determined by midterm and final grades in the three major courses.

During the first four (4) weeks, you will be running the O-Course and C-Course for a grade; taking the strength test, which consists of: pull-ups, sit-ups, push-ups, and jump-reach. You will be tested on your proficiency in the four basic swimming strokes (side, back, breast, and crawl), treading water, underwater swimming, and a one-mile endurance swim in flight suit and boots. If you are not an excellent swimmer, ample time will be given to you to work up to standards during remedial swim instruction.

Upon completion of A.I., you will be given orders to report to one of the five primary training squadrons: VT-2, VT-3, or VT-6 at NAS Whiting Field in Milton, FL (about 20 miles NE of Pensacola), or VT-27, or VT-28 at NAS Corpus Christi, TX. Here you will begin training in the T-34C Turbo Mentor. The T-34C is a fully aerobatic two-seat, low-wing, turboprop training aircraft handled under contract with Beechcraft. The T-34 is soon to be replaced by the T-6 II Texan, a similar design, but more capable aircraft.

When you report to Whiting Field, or Corpus, you will begin a 13-week ground school, 4 weeks of which will be completed prior to your first flight. During that time you will be taking classes in local course rules, flight rules and regulations for VFR (visual) flight, turbo-prop engines, aerodynamics, meteorology, and IFR (instrument) flight rules. During the fourth week you will start in your cockpit procedure trainer (CPT), which are T-34 emergency procedure trainers. There are six of these prior to the start of flying.

At this point you're finally ready to start flying. You will be assigned an "on-wing" instructor who will guide you through the first seven familiarization, or FAM,

flights. You will concentrate on learning the local flying rules, take-offs and landings, simulated emergency procedures, and basic flying procedures. The FAM stage consists of fourteen (14) flights, with number thirteen (13) being a safe-for-solo check ride, and number fourteen (14) being your first solo in the T-34C.

After completing your FAMs you will proceed to Precision Aerobatics, or P.A.'s. These consist of five flights, with P.A. 2 and 4 being solo flights. You will be instructed on how to perform loops, barrel rolls, aileron rolls, wing overs, and precision landings.

After the five (5) P.A. flights you will move into the next phase, which is Formation Flying, or FORMs. In this evolution you will be taught the procedures for safely flying two aircraft in very close proximity. FORMs consists of five (5) flights with FORM 5 being a solo.

The Basic Instrument course, or B.I., follows FORMs. In your five (5) B.I. flights you will be introduced to the procedures for flying the aircraft using only the instruments inside of the cockpit with no visual references. This stage is referred to as "under the bag" as all of the flying is done with a cloth covering the canopy so the student can only see the flight instruments. When you complete Basic Instruments, you move on to the meat of the program in Radio Instruments, or R.I.'s. This stage will instruct you on how to employ the aircraft's instruments to execute precision and non-precision instrument approaches. All Marine Corps operational aviation is performed in the instrument environment, so this stage is very important. There are six flights with R.I. 6 being a final check-ride.

The culmination of R.I.'s also marks the end of Primary flight training. At this point the student selects the particular aviation community that he/she wishes to enter.

The student first lists his/her preferences in order, (i.e. 1. Jets 2. Props 3. Helos). Once you make your choices, the Marine Corps makes theirs. Selection is based on: (1) needs of the Marine Corps, (2) the student's overall ranking in Primary Flight Training, and (3) student desires.

## **JETS**

If you are selected for jet training, you will receive orders to one of two jet-training bases: NAS Kingsville, Texas, or NAS Meridian, Mississippi. Upon arrival you will complete four (4) weeks of ground school, consisting of instrument flight rules and regulations, visual flight rules and regulations, meteorology, and aerodynamics for your particular aircraft. When you report to NAS Kingsville, Texas, or Meridian, Mississippi, you will go through the Strike/ JET TS syllabus. The TS (Total System) program utilizes the T-45C Goshawk training aircraft. This aircraft is patterned after the Royal Air Forces Hawk attack aircraft. The T-45C also incorporates a totally glass cockpit in which large computer displays replace traditional flight instruments. The layout is similar to the F/A-18 C/D Hornet, and the T-45C utilizes the same Heads Up Display, or HUD, as the F/A-18 C/D and the A/V-8B II Plus Harrier. The initial training includes transition to jet aerobatics, instruments, formation flying, gunnery (air-to-air and air-to-ground), as well as carrier qualification.

Regardless of the location from which you learn, at the end of 65-98 weeks of JET TS training you will earn your "Wings of Gold" and be designated a Naval Aviator. You will then receive orders to report to the Replacement Air Group, or RAG, for

training in the particular aircraft you will fly in the fleet, whether it be the F/A-18 C/D Hornet, the A/V8-B II Plus Harrier, or the EA-6B Prowler.

## **HELICOPTERS**

Those students selected for helo training will remain at their primary squadron for about six (6) weeks of intermediate training, which consists of more instruments, day and night VFR (visual) navigation flights, and a cross-country flight with one of your instructors. Once you've completed intermediate training, you will report to HT-8 at NAS Whiting Field, FL for basic helicopter training. The training is done in the TH-57 B/C Sea Ranger, a military version of the Bell Ranger. This phase consists of approximately 30 hours of training with appropriate ground schooling. It lasts approximately five (5) weeks. Upon completion of Basic Helo, you will move next door to HT-18 for advanced engineering and a course in advanced instrument navigation. The flight portion consists of approximately ten (10) flight hours, and upon completion the student will receive his/her "Wings of Gold" and be designated a Naval Aviator. You will be assigned to a Replacement Air Group for training in the particular aircraft that you will fly in the fleet, whether it be the AH-1W Super Cobra gunship, the CH-53E Sea Stallion, the UH-1N Huey, the CH-46 SeaKnight, or the MV-22 Osprey TiltRotor aircraft.

## **PROPS**

If you are selected for one of the few Maritime slots offered to Marine pilots, you will complete intermediate training at NAS Whiting Field, FL. You will then receive orders to VT-31 at NAS Corpus Christi, TX for 4-5 months of multi-engine training in the Beechcraft T-44, which is the military version of the popular Beechcraft Super King Air. Maritime training consists of one week of navigation, one week of aircraft systems, one week of self-paced studies (where you work with programmed texts on flight rules), aerodynamics, meteorology, and advanced instrument navigation. There is also one week of proficiency training in checklists and ground emergencies. The flying in the T-44 begins at the completion of these ground courses. Flight training consists of 10 FAM flights, 5 BI flights, 22 RI flights, with 13 simulator flights, and a cross country with a fellow student. The training consists of approximately 100 flight hours. When you complete your training you will receive your “Wings of Gold” and be designated a Naval Aviator. You will then receive orders to the Replacement Air Group for the KC-130 Hercules.

Regardless of what community you end up in, you cannot go wrong. You will be recognized as a Naval Aviator wherever you go. Your peers and other aviators all over the world will respect you. So take the challenge, become a Marine Corps Aviator, and earn your “Wings of Gold!”

## **FLY MARINES!!**