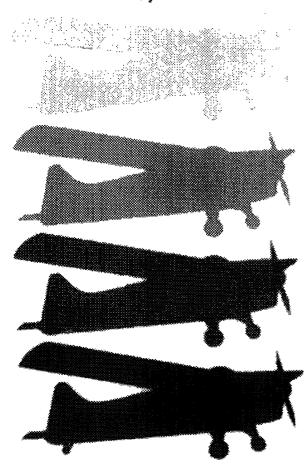
AC 20-96

SURPLUS MILITARY AIRCRAFT

AIRCRAFT
A Briefing for Prospective
Buyers



US Department of Transportation: Federal Aviation Administration

IMPORTANT CONSIDERATIONS

- 1. <u>CAN YOU CERTIFICATE IT</u>? Many surplus military aircraft do not conform to any existing civilian type certificate, and some can never be made to conform, regardless of the effort and money expended to modify the aircraft. Department of Defense (DOD) does not represent or guarantee that surplus aircraft offered for sale can be certificated as civil aircraft.
- **2.** <u>IS IT SAFE</u>? It is difficult, perhaps impossible, to assess the actual airworthiness status of a surplus aircraft that has undergone various modifications and parts replacement, as well as operational maneuvers that could have overstressed the airframe or other components. What do you really know about this particular aircraft's flight characteristics?
- 3. <u>CAN YOU AFFORD IT</u>? Have you made an honest estimate of the time and money that may be required before this airplane can be certificated and pronounced airworthy? The process may take months, even years, and the ultimate cost could conceivably exceed the purchase price of a comparable used civilian aircraft. Talk it over with a Federal Aviation Administration (FAA) inspector before you invest.
- **4.** <u>CAN YOU FLY IT</u>? Have you been properly trained, checked-out, and certificated by FAA? You must be in order to fly the aircraft. To avoid a possible violation of the FAA regulations, consult the nearest FAA General Aviation District Office (GADO) or Flight Standards District Office (FSDO).



Are They A Good Buy?

Everybody loves a bargain, and when it comes to second-hand birds, the biggest dollar bargain in sight may appear to be a surplus military aircraft. Take care-it could be "booby-trapped" with pitfalls.

The Department of Defense has made extensive use of helicopters and light observation planes in Vietnam, and in training commands in this country. From time to time some of this equipment finds its way into the civilian market via surplus sales to the public. Would-be buyers should be aware of one important fact:

Before you can obtain an airworthiness certificate for any ex-military aircraft you-not FAA, not the military, not the people who actually sold you the airplane, but you-must obtain an FAA type certificate (FAA type design approval) or be able to show that the aircraft conforms to an existing civilian model which has an FAA type certificate; and you must prove that it is in a condition for safe operation (airworthy).

Depending on the model and history of the aircraft you acquire, this process could be relatively simple, involving only a few days of your time, or it could be extremely complicated, lasting months or even years, and very expensive. The road to certification is not exactly paved with red tape, but it can be pretty heavily papered with invoices, aircraft drawings, records, logbooks, and dozens of other documents which must be located, examined or filled out.

Two Kinds Of Surplus

The Department of Defense sells two kinds of surplus aircraft. Some are sold for the purpose of flight (although not necessarily flyable at the time). Such aircraft are usually accompanied by service records and aircraft logs which are available to the purchaser. Other aircraft are sold for recovery of parts or reduction to scrap, without, in many instances, accompanying records of any kind.

FAA Screening Inspection

The FAA, in cooperation with the DOD, normally performs a preliminary "screening" inspection on surplus military aircraft, prior to their sale by DOD.

The purpose of these inspections is to alert prospective purchasers as to the civil certification potential of each surplus aircraft.

Upon completion of the "screening" inspection, the FAA renders an opinion to the DOD as to the civil certification potential. Those aircraft which have potential for certification are sold by DOD as flyable. The FAA opinion, however, should not be misconstrued as implying that these aircraft, in their condition as sold, are entitled to a Standard Airworthiness Certificate. A considerable amount of effort and expenditure may be necessary before civil certification can be achieved. The FAA does not assume any liability or in any way guarantee that those aircraft identified as potentially certifiable can be certificated as civil aircraft.

Those aircraft which FAA renders a "no potential" disposition are sold for recovery of parts or reduction to scrap.

Information On Sales

Advance information on upcoming sales is available from the Defense Surplus Sales Office, Dept. RK-24, P.O. Box 1370, Battle Creek, Michigan, 49016. This office maintains a master list of all persons interested in bidding on surplus material, including their geographical location and particular interests, and provides them with an invitation to bid on appropriate offerings in their area. The invitation includes details on terms of sale, location of the property, description, quantity, dates of inspection, time and date of bid opening, removal of property, etc.

Removal Of Aircraft From Site Of Sale

When a sale has been completed, the first problem is removal of the aircraft to the buyer's home base. If one is dealing with disassembled parts or nonflyable aircraft, these can simply be freighted to the destination without paperwork. But if the aircraft can and is to be flown, it must be registered, and you must obtain a special flight permit.

If you have ample time, you can obtain a registration form from the nearest FAA Flight Standards District Office (GADO, EMDO, FSDO). Send your application to: Department of Transportation, Federal Aviation Administration, Airmen and Aircraft Registry, AAC-200, P.O. Box 25504, Oklahoma City, Oklahoma, 73125. Your "N" number and registration will then be issued by mail. As an alternative, you can telephone the FAA Aeronautical Center and ask for an "N" number and have it reserved. Use the number on an application for registration, putting the appropriate copy of the application in the aircraft as a temporary registration, and mail the application; affix the registration number on the aircraft.

Once your aircraft has been registered you would then apply to the nearest General Aviation District Office (GADO), Engineering and Manufacturing District Office (EMDO) or Flight Standards District Office (FSDO) for a special flight permit. This permit will only be issued when the FAA has determined that your aircraft is safe for the flight. It is a good idea at this time to have all available documents regarding the aircraft so that its identity and safe condition can be readily established. In all cases, an FAA inspector will want to inspect the aircraft before he authorizes you to fly it-which may well contribute to your own safety. It should be noted that the special flight permit will only authorize you to fly your aircraft to your home base (or other destination as appropriate). Subsequent flights are not permitted under this authorization.

Certification

Once your military aircraft has been transported to your home airport the process of obtaining civil certification begins in earnest. Prior to accomplishing any work on your aircraft, you should contact your nearest FAA-EMDO (Engineering and Manufacturing District Office); these are called AEDO's (Aircraft Engineering District Offices) in the Western Region. The FAA will assist you in determining what is needed to certificate your aircraft. A mutually agreeable inspection program can also be established at this time. This will ensure that all work to be performed is accomplished in accordance with pertinent regulatory requirements.

Establishing conformity with the type design officially identifies the aircraft for civilian use. It confirms that the basic design is one which has been nested and approved by FAA. It is your responsibility to "show" the FAA that your aircraft conforms to the FAA approved type design (type certificate), and that the aircraft is in a condition for safe operation. You are also responsible for obtaining the technical data necessary to make this showing.

The FAA is responsible for "finding" that your aircraft conforms to the FAA-approved type design, and is in a condition for safe operation. You must be prepared to compare the parts of your aircraft against the FAA approved drawings to show conformance. The FAA inspector may want to check some details to verify conformance to the type design. All of this can be a time-consuming process.



The "Big If"

The "Big If" is whether all parts, which were replaced by the military, are approved for use on civil aircraft. Since the military frequently purchase quantities of aircraft parts from the lowest bidder, who may not hold a civil production approval, these parts may not be FAA-approved. If such parts have been installed in your aircraft, you now have the task of proving conformity of every non-approved part to the approved type design. You may do this by inspecting the parts to the FAA-approved drawings and specifications. Testing of the part may also be required.

This, however, is not always practicable, since many parts cannot be inspected, and in some cases thorough testing would render a part unusable. In these instances, you would either have to produce an invoice to substantiate that the parts were produced under an FAA approval, or replace the parts with those approved by FAA. Your task of proving conformity to the type design could be monumental. It is your responsibility to assure the FAA inspector that every single part was either made by a manufacturer who possesses an FAA approval, or that the part conforms fully to the FAA-approved design. When an aircraft has been modified by the military, you must either return the aircraft to the originally approved civil configuration, or obtain FAA design approval for the military modification. This is accomplished through the Supplemental Type Certificate (STC) process.

In those instances where you may desire to modify the aircraft for a special purpose operation (e.g., crop dusting), these modifications must also be submitted to the FAA for approval. These modifications usually require an FAA Supplemental Type Certificate.

Supplemental Type Certificates

Any person who alters/modifies certificated aircraft by introducing a major change in type design, shall apply to the Administrator for a Supplemental Type Certificate. Major changes are those which basically affect weight

and balance, structural strength or flight characteristics.

One Foot in the Cockpit

When your aircraft's identity is clearly established and inspection has shown that it conforms to an FAA-approved type design and is in a condition for safe operation, and you have conducted a weight and balance procedure, an experimental certificate can be issued for the purpose of showing compliance to the rule. You are then allowed to set foot in the cockpit-but not for a joy ride. You are expected to flight test the aircraft in strict accordance with an FAA-approved flight test procedure developed specifically for your aircraft. The flight test program should be coordinated with FAA for approval, prior to accomplishment. You must report on its performance to the FAA Engineering Flight Test Inspector, who may ask for additional flights and who will also flight test the aircraft. An application for a standard (or other) airworthiness certificate should be submitted to the EMDO following completion of satisfactory flight tests.

Only when that significant piece of paper is in your hand may you operate the aircraft at your own volition. (If your aircraft has been modified for a particular use, such as crop/lusting, your airworthiness certificate may be restricted accordingly)

The path to civil certification of a surplus military aircraft may seem unnecessarily long and tortuous, but it is based on the simple premise that an aircraft which is not known to be safely designed and constructed to civil airworthiness standards, and which may not be in a flyable condition can endanger the airspace and the general public. It is responsibility to prevent such hazards, but the agency does not have the manpower to research and establish the credentials of aircraft other than standard production type models. This is your part of the bargain when you buy a surplus military aircraft and you have to live up to it before you can fly.

NECESSARY FORMS

Application for Registration (AC Form 8050-1) An aircraft is eligible for registration only when it is owned by a citizen of the United States and it is not registered under the laws of any foreign country, or if it is owned by a governmental unit. Operation of an aircraft that is not properly registered may subject the operator to a civil penalty.

Bill of Sale (AC Form 8050-2)

Applicants for registration of aircraft must submit a Bill of Sale or any other recordable evidence of ownership.

Application of Airworthiness Certificate (FAA Form 8130-6)

Any registered owner of a U.S. registered aircraft (or an authorized agent of the owner) may apply for an airworthiness certificate. An application for an airworthiness certificate must be made in a form and manner acceptable to the Administrator. Applications should be submitted to any FAA Engineering and Manufacturing District Office.

Airworthiness Certificate (FAA Form 8100-2)

A standard airworthiness certificate is issued for an aircraft which complies with the FAA-approved data forming the basis for a type certificate and which is found to be in a condition for safe operation.

Special airworthiness certificates (FAA Form 8130-7) are also issued as appropriate, for aircraft in the restricted, provisional experimental categories and for special flight permits.

An airworthiness certificate can only be amended or modified upon application to the Administrator.