

Bundesrepublik Deutschland
Federal Republic of Germany

Der Beauftragte
Authorized Representative



Musterzulassungsschein
Type Certificate

für Luftsportgeräte
Nr.: 61144

Das nachstehend bezeichnete Luftfahrtgerät ist als Muster zugelassen auf Antrag
VON: Fa. Roland Hauke, Schloßgartenweg 3, 72124 Pliezhausen

Dieser Musterzulassungsschein ist auf Grund der die Musterzulassung betreffenden
Bestimmungen des Luftverkehrsgesetzes und der Verkehrszulassungsordnung in
der am Tage der Ausstellung gültigen Fassung erteilt.

Die Musterzulassung gilt gemäß zugehörigen Geräte-Kennblatt-Nr.: 61144

Bezeichnung des Gerätemusters: ZODIAC CH 601 D

Geräteart: Ultraleichtflugzeug

Die Musterzulassung kann in den in § 4 Abs. 2 der Luftverkehrszulassungsordnung
vorgesehenen Fällen widerrufen werden.

*On application of above and in accordance with the German Certification Regulations as of today
the Type Certificate for the following product is issued: Ultralight Aircraft.
The Type Certificate Data Sheet No. 61144 is part of the Type Certificate.*

*The type certification may be revoked by the Authorized Representative in cases listed in the
German Certification Regulations.*

Datum der Ausstellung:
Date of issue:

Unterschrift
Signature

Heusenstamm, den 10.09.1996

A handwritten signature in black ink, appearing to read "Hauke". It is written over a horizontal line.



UNITED KINGDOM
CIVIL AVIATION AUTHORITY

CONDITIONS OF
PERMIT TO FLY NO PR 051885/001

Dated: 19 JANUARY 2001

Nationality and Registration Marks	Constructor and Constructor's Designation of Aircraft	Aircraft Serial Number
G-BZFV COPY	DONNELLY IM ZENAIR CH 601UL	PFA 162A-13547

1. The aircraft shall not be flown for the purpose of public transport or aerial work except aerial work which consists of flights for the purpose of public exhibition or public demonstration, including practice flights, test flights, and positioning flights associated with such demonstrations.

2. The aircraft shall not be flown over any congested area or city, town or settlement.

3. In the case of an aircraft designed for disassembly and re-assembly by the pilot prior to flight, the pilot in command shall be satisfied that correct re-assembly for flight has been made in accordance with the manufacturer's/PFA instructions.

4. The aircraft shall be maintained in an airworthy condition and in compliance with relevant Mandatory Permit Directives.

5. The aircraft shall be operated in accordance with the procedures and limitations contained in the manufacturers' instructions or in compliance with the associated Conditions of the Permit to Fly and PFA Operating Limitations. Where relevant the Conditions of the Permit to Fly and PFA Operating Limitations override the manufacturers' instruction.

6. No alterations or modifications shall be made to this aircraft or to its engines, propellers, or equipment, unless approved by the CAA or other Organisations approved by the CAA for the purpose.

7. A permanent placard shall be affixed to the aircraft in full view of the occupants, and shall be worded as follows:

Occupant Warning

(i) This aircraft has not been certificated to an International Requirement

(ii) Classification: Small Light Aeroplane

8. A Flight Release Certificate shall be issued certifying that the aircraft has been inspected and is fit for flight. This Certificate shall only be issued by persons authorised by the CAA. The Certificate shall be re-issued after overhaul, replacement, maintenance, repairs, modifications or inspections. A Flight Release Certificate is not required after pilot maintenance for those items listed in document reference PFA/PM/1.

No entries or endorsements may be made on this Certificate except by an authorised person.

CA960PFA/SLA/C
210200

POPULAR FLYING ASSOCIATION

Airworthiness Approval Note: PFA-162A-420

Aircraft Type: Zenair CH601 UL

Serial Number: PFA 162A-13585 and PFA 162A-13547

Registration: G-ZODI and G-BZEV

Foreword

The Zenair CH601 UL is an 'SLA' variant of the Zenair CH601 HD, the latter having been accepted by the PFA for many years as a 'group A' homebuilt aircraft, several examples of this type having been built under PFA supervision.

G-ZODI and G-BZEV are the first UK examples of the CH601 UL variant to be completed and flown, differing only in their choice of engine and propeller.

This AAN has been raised as a design reference for G-ZODI and G-BZEV and any subsequent examples of the CH601 UL built to the same standard.

Issue 1 Initial issue

19th January 2001

Approved:

Dated: 19th January 2001

For the Popular Flying Association
CAA Approval DAI/1172/48

PFA TYPE DATA SHEET

Aircraft Type: Zenair CH601 UL

Engine Type: Rotax 912-UL (G-ZODI) or Rotax 912-S (G-BZFW)

Propeller Type: GSC Tech-III 68" diameter x 13 degrees (G-ZODI)
or Sport Prop VP 2 bladed 1660MM diameter (G-BZFW)

LIMITATIONS

1. Maximum number of occupants authorised to be carried: Two
2. The aircraft must be operated in compliance with the following operating limitations, which shall be displayed in the cockpit by means of placards or instrument markings:

2.1 Aerobatic Limitations

This aeroplane is permitted to fly only for non-aerobatic operation. In this context non-aerobatic operation includes:

- i) Any manoeuvre necessary for normal flying
- ii) intentional stalls from level flight
- iii) steep turns in which the angle of bank does not exceed 60 degrees

Intentional spinning is prohibited.

2.2 Loading limitations

Maximum Total Weight Authorised: 450 Kg

CG Range: 10.5 inches to 17.5 inches aft of datum.

Datum Point is: The leading edge of the wing.

2.3 Engine Limitations

Maximum Engine RPM: 5800

Maximum Continuous Engine RPM: 5500

2.4 Airspeed Limitations

DESCRIPTION

The Zenair CH601 UL is a conventionally configured low wing cantilever monoplane aircraft of riveted aluminium alloy construction, seating two side by side in an enclosed cockpit. It is available as a kit or as a set of plans from European Zenair sub-contract manufacturers the Czech Aircraft Works. Both G-ZODI and G-BZFW have been built from quick-build kits supplied by Czech Aero Works. The kit may be purchased in two formats which are considered to meet the 500 hour amateur-building criteria of CAP 659, being the quick-build kit and the 19% kit options. The 100% kit available from Czech Aero Works is not eligible in the UK.

The CH601 UL model is a variant of the CH601 series which has been developed for the European ultralight market. Differences between the CH601 UL model and the already-accepted CH601 HD are as follows:

- a. Addition of three-piece split flaps to lower the stall speed. These are of riveted aluminium alloy construction, and operated by a mechanical system of torque tubes, pushrods and levers, and actuated by a hand lever on the port cockpit sidewall.
- b. The structural reinforcements which distinguish the CH601 HD 'heavy Duty' model from the original CH601 model have not been included.

As with the CH601 HD, the aircraft is available with several alternative options including the choice of nosewheel or tailwheel undercarriage and a side-opening or front-opening canopy. G-ZODI is fitted with the nosewheel undercarriage and side-opening canopy, while G-BZFW is fitted with a nosewheel undercarriage and forward-opening canopy.

A number of different fuel tank configurations are available, including a front fuselage tank, wing tanks between the wing spars and wing tanks in the wing leading edges. Both G-ZODI and G-BZFW are fitted with a fuselage tank only, in order to keep the aircraft's empty weight within permitted limits, and it is unlikely that additional fuel tanks will be able to be accepted on the CH601-UL model in the UK.

A number of different engine options are available including the 80 BHP Rotax 912-UL and 100 BHP Rotax 912-S. G-ZODI is fitted with the Rotax 912-UL engine while G-BZFW has the uprated 912-S.

When fitted with the Rotax 912-UL and 912-S engine, the Zenair option of moving the firewall forward by 50mm is considered essential to keep the aircraft's empty cg forward and allow safe loading within the reduced (17.5" as opposed to the manufacturer's recommended 19.7") aft cg limit specified by the PFA.

The standard aileron hinging rely on flexure of the top wing skin for aileron deflection. This is considered acceptable although some owners have found that this causes what they considered excessive aileron control forces, and have fitted the optional conventional piano type aileron hinges. This option is also considered acceptable by the PFA.

BASIS FOR APPROVAL

The Zenair CH601 UL has been assessed as a variant of the already accepted Zenair CH601 range using BCAR Section S issue 2 as the reference design code where appropriate.

INVESTIGATION

(1) It has been checked that empty weights of G-ZODI and G-BZFV at 579 Lbs and 578 Lbs respectively are less than the maximum permissible empty weight as specified by BCAR S23, S25 and S29 when operated as a two seater with a maximum gross weight of 450 Kg. Assuming a maximum cruise fuel consumption of 10 Kg/hr the maximum permissible empty weight is $450 - 86 - 86 - 10 = 268$ Kg (589 Lbs)

(2) A stress analysis of the CH601 airframe has been submitted showing compliance with all the main requirements of FAR 23 subpart C and D at the higher maximum gross weight of 1058 Lbs (489 Kg). This is considered to provide at least equivalent safety with complying with BCAR Section S subpart C and D at a maximum gross weight of 450 Kg (992 Lbs).

(3) A separate stress analysis of the split flap installation has been provided showing compliance with the applicable paragraphs of BCAR Section S Subpart c and D. The analysis of the flap operating system resulted in the flap operating lever having to be replaced a reinforced operating lever of $\frac{3}{4}$ " x 0.058" wall 4120N in order to meet pilot effort requirement of S405.

(5) Zenair have submitted a set of pilot notes for the aircraft including a supplement dealing with the use of the split flaps.

MODIFICATION STATE

The following UK modifications have been called for in order to provide an adequate level of safety:

MOD/162A/001 Flap operating lever of increased wall thickness ($\frac{3}{4}$ " x 0.058" 4130N fitted, to comply with BCAR S para S405. Wall thickness on original lever 0.035". Czech Aircraft Works supplied the new component.

MOD/162A/002 Firewall moved forwards 50mm to improve aircraft's empty cg position. Czech Aircraft Works optional 'Extended Fuselage Kit' refers.

MOD/162A/003 Elevator and rudder control systems must exhibit minimum control friction in order to ensure an acceptable level of pitch and yaw stability.

MOD/162A/004 Nosewheel steering to be provided with additional return springs to provide adequate level of directional stability. Drawing MOD/162A/004 refers.

MOD/162A/005 In common with the CH601 HD series aircraft, Conventional aircraft turnbuckles of rating appropriate to cable diameter substituted for 'home made' cable tensioners in flying control system. Barrel p/n AN155-126S/1999 and eye ends MS2125/C3RS and AN170/16LS refer.

MOD/162A/006 In common with the CH601 HD series aircraft, Either the aircraft must be fitted with a forward-opening canopy option (drawings CF-1 to CF-14 refer) or if the standard sideward opening canopy is fitted, the inner canopy opening levers must be omitted and the shoulder harnesses prevented from being able to get caught in the rear canopy retaining claw, a suitable method being by fitting a short length of split foam domestic water pipe insulation sleeve over the harness in the area concerned, retained by tie-wraps.

MOD/162A/007 Aft cg limit restricted to 17.5" AOD. In order to achieve this, any significant weight of baggage must be carried in the wing baggage lockers rather than the rear cockpit locker.

PLACARDS

In addition to the placards called for on page 2 this AAN, the following placard must also be fitted in the cockpit in full view of the occupants: (missing figures to be completed as appropriate)

Category: Small Light Aeroplane

Empty weight: ? Kg date of weighing ?

Max Total Weight Authorised: 450Kg

Maximum permitted empty weight: 268 Kg

Maximum fuel load with two occupants of 86 Kg each, ? litres

Maximum combined crew weight with full fuel, ? Kg

FLIGHT TEST

G-ZODI and G-BZFV have both completed in excess of twelve hours flying without defect and been flight tested to PFA flight test schedule 81/1/l.

G-BZFV has been the subject of an independent flight test under PFA supervision. Performance and handling has been found to be essentially identical to previous examples of the CH601 variants fitted with Rotax 912 engines, being characterised by

powerful lateral stability but weak but just positive longitudinal static stability and directional static stability, within the restricted aft cg limit of 17.5" AOD. Control forces are light about all axes and the aircraft is easy to fly despite the light stabilities in yaw and pitch. Stall warning is particularly noticeable due to drumming of the rear fuselage skins in the buffet, and the aircraft displays a particularly benign stall.

Operation of the wing flaps deployed has been found to be satisfactory, the flaps being easily operated and giving a useful steepening of the glide angle, with associated greater nose-down pitch attitude. The stall speed with flaps fully deflected was measured using a GPS, averaging the results of a series of stall tests carried out upwind and downwind, and found to be 40 mph, placing the aircraft into the SIA category. The stall characteristics with flaps deployed are similarly benign, producing slightly greater wing dropping tendency but still gentle and controllable with ailerons and rudder still functional throughout. Flight test results are held in file PFA/G-BZEV.

NOISE CERTIFICATION

Noise certification flight tests have been carried out successfully on G-ZODI and G-BZEV, Noise Certificates #1656 and 1652 issued accordingly on 22.9.2000 and 14.9.2000 respectively.

RECOMMENDATION

It is recommended that the aircraft is issued with a Permit to Fly subject to the limitations shown on page 2. It is certified that the aircraft complies with the stated design standard and is built to accepted aeronautical standards.

Date: 19th January 2001

Approved:

For the Popular Flying Association
CAA Approval Number DAI/1172/48

SAFETY REGULATION GROUP

**Aviation House
Gatwick Airport South
West Sussex
RH6 0YR**

**Direct Dial 01293 573179
Direct Fax 01293 573972**

**Switchboard 01293 567171
Fax 01293 573999
Telex 878753**

25 JAN 2001

**Mr J M Donnelly
Birse Lodge Cottage
Charleston Road
Aboyne AB34 5EL**

Our ref 9/23/G-BZBV

24 January 2001

Dear Sir

REGN:- G-BZBV TYPE:- ZENAIR CH 601UL SERIAL NO.:- PFA 162A-13547

Following a recommendation from the Popular Flying Association for the above mentioned aircraft, please find enclosed

Documents enclosed: **Permit to Fly
PFA Operating Limitations
Certificate of Validity**

Yours faithfully

JL.

**Joan Lacey (Mrs)
Applications & Certification Section**



LUFTFARTSVERKET

Swedish Civil Aviation Administration

TYPINTYG

Nr UL B-35

Detta typintyg intygar att nedan angiven typ av ultralätt flygplan uppfyller luftvärldighetsfordringarna i Bestämmelser för Civil Luftfart (BCL), BCL-M 5.4

Produkt Ultralätt flygplan klass B av typ ZENAIR CH 701 STOL

Ansökan ELVO ELECTRONIC ARCHAID SWEDEN AB, Viktoriagatan 15,
411 25 GÖTEBORG genom Motorflygförbundet KSAK (L2000-
2648-1041)

Typunderlag Sammanställd teknisk specifikation UL B-35, upprättad av
Motorflygförbundet KSAK den 16 augusti, 2000 (L2000-2648-
1041)

Begränsningar Enligt specifikation UL B-35 samt däri specificerad flyghandbok
eller senare revision

Referens för godkännande Ansökan om tillstyrkan om godkännande i brev från
Motorflygförbundet KSAK daterat den 16 augusti, 2000 (L2000-
2648-1041)

Norrköping den 23 augusti, 2000

LUFTFARTSVERKET
Luftfartsinspektionen

Eskil Wiklund

Nils von Koch

Translation from the origin

TYPE ACCEPTANCE CERTIFICATE

N0. UL B-35

This Type Acceptance Certificate confirms that the type of ultra-light aeroplane specified below complies with the airworthiness requirements in Bestämmelser för Civil Luftfart (BCL), BCL-M 5.4

Product	Ultralight aeroplane class B of type ZENAIR CH 701 STOL
Application	ELVO ELECTRONIC ARCHAID SWEDEN AB, Viktoriagatan 15, 411 25 GÖTEBORG through Motorflygförbundet KSAK (The Royal Swedish Aeronautical Aeroclub) (L2000-2648-1041)
Type Design	Technical Specification UL B-35, drawn up by Motorflygförbundet KSAK August 16, 2000 (L2000-2648-1041)
Limitations	According to Technical Specification UL B-35 and the Aeroplane Flight Manual specified in that Technical Specification or later revision
Approval References	Application for recommendation of approval in a letter from Motorflygförbundet KSAK dated 16, 2000 (L2000-2648-1041)

Norrköping August 23, 2000

LUFTFARTSVERKET
Luftfartsinspektionen

Eskil Wiklund

Nils von Koch

SLOVENSKÁ REPUBLIKA
LETECKÝ ÚRAD

SLOVAK REPUBLIC
CIVIL AVIATION AUTHORITY

OSVEDČENIE LETOVEJ SPÔSOBILOSTI

CERTIFICATE OF AIRWORTHINESS

0564 - S

č./No:.....

Značky štátnej príslušnosti a registra : Nationality and Registration Marks :	Výrobca a typ lietadla : Manufacturer and Designation of Aircraft :	Výrobné číslo lietadla : Aircraft Serial Number :
OM-ATIS	ATIS s.r.o., letisko Slávnicka ZODIAC CH-601	6 - 2212
Kategória : Category :	Ultraľahký letún - Súkromná Ultralight aeroplane - Private	

Toto osvedčenie letovej spôsobilosti je vydané v zhode s Dohovorom o medzinárodnom civilnom letectve zo dňa 7.12.1944 a podľa zákona zo dňa 24.9.1956 č. 47 Zb. o civilnom letectve a predpisov na jeho základe vydaných pre uvedené lietadlo, ktoré sa považuje za spôsobilé na lietanie, ak bude udržované a v prevádzke používané podľa príslušných predpisov s príslušnými prevádzkovými obmedzeniami.

This Certificate of Airworthiness is issued pursuant to the Convention on International Civil Aviation dated 7th December 1944 and to the Civil Aviation Act No. 47 dated 24th September 1956 and regulations made thereunder in respect of the above-mentioned aircraft which is considered to be airworthy when maintained and operated in accordance with the pertinent regulations and operating limitations.

23. SEP. 1998

Dátum vydania / Date of issue



Podpis / Signature

SLOVENSKÁ REPUBLIKA
LETECKÝ ÚRAD

SLOVAK REPUBLIC
CIVIL AVIATION AUTHORITY

ZVLÁŠTNE OSVEDČENIE LETOVEJ SPÔSOBILOSTI
SPECIAL CERTIFICATE OF AIRWORTHINESS

17/2000

č.: _____
No.

Značky štátnej príslušnosti a registrové značky: Nationality and Registration Marks:	Výrobca a typ lietadla: Manufacturer and Designation of Aircraft:	Výrobné číslo: Aircraft Serial №:
OM - HDS	ATIS, spol.s r.o SLÁVNICA CH - 601 HDS	6 - 3687
Vydané na základe: Basic of issuance: Leteckého predpisu L 8/A ods. 4.3.4.1. písm. d)		
Vydané pre: Issued to: ATIS, spol.s r.o. letisko 018 54 SLÁVNICA	Dôvod: Reason: výrobné letové skúšky novovskyrobeného lietadla	
Obmedzenia: Limitations: - Dané programom letových skúšok a letovou príručkou - Pilot: Karol Benedikovič, č.p. 02980030 Milan Rehák, č.p. 02970148	Platné pre oblasť/trat: Valid for area/line: územie Slovenskej republiky	
Dátum vydania: Date of issuance: 17.04. 2000	Platné do: Valid to: 31.08. 2000 alebo do vykonania sériovej skúšky, podľa toho čo nastane skôr	
Riaditeľ LÚ SR Director CAA SR Ing. Ján KAŠŠÁK	Pečiatka: Stamp: 	Podpis: Signature: 

SLOVENSKÁ REPUBLIKA
LETECKÝ ÚRAD

SLOVAK REPUBLIC
CIVIL AVIATION AUTHORITY

**OSVEDČENIE O ZÁPISE LIETADLA
DO REGISTRA LIETADIEL**

CERTIFICATE OF REGISTRATION

0564-S
Č. :
No.

1. Značky štátnej príslušnosti a registra: <i>Nationality and Registration Marks:</i>	2. Výrobca a typ lietadla: <i>Manufacturer and Designation of Aircraft:</i>	3. Výrobné číslo lietadla: <i>Aircraft Serial Number:</i>
OM - A T I S	ATIS s.r.o. Letisko Slávnicka ZODIAC CH-601	6-2212

4. Názov vlastníka ATIS s.r.o.

Name of owner

Názov prevádzkovateľa SNA gen.M.R.Štefánika

Name of operator

5. Adresa vlastníka 018 41 Slávnicka, letisko

Adress of owner

Adresa prevádzkovateľa 831 07 Bratislava, letisko Vajnory

Adress of operator

6. Týmto sa osvedčuje, že hore uvedené lietadlo bolo riadne zapisané do
REGISTRA LIETADIEL SLOVENSKEJ REPUBLIKY

v súlade s Dohodou o medzinárodnom civilnom letectve zo dňa 7. decembra 1944
a podľa ustanovenia zákona o civilnom letectve.

*It is hereby certified that the above described aircraft has been duly entered on the
AIRCRAFT REGISTER OF SLOVAK REPUBLIC
in accordance with the Convention of International Civil Aviation dated
7th December 1944 and with the provision of the Law on Civil Aviation.*

23.9.1998

Dátum vydania / Date of issue



Kopček

Podpis / Signature



Letecká amatérská asociace ČR - Light Aircraft Association of Czech Republic

Typový průkaz – Type Certificate

Letecká Amatérská Asociace české republiky (dále LAA ČR) v souladu s ustanovením § 81 odst. 2. zákona o civilním letectví č. 49/1997 Sb. byla dne 14. 1. 1997 pověřena řízením pro civilní letectví vymezenými činnostmi, které souvisejí s výrobou a provozem sportovních létajících zařízení (dále SLZ) v České republice, c. j.: 1539/PJ-165/97

Označení typu letecké techniky:

Designation of the type of aviation technology:

Dvoumístný, jednomotorový, aerodynamicky řízený, celokovový dolnoplošný ultralehký letoun - sportovní létající zařízení

Typové označení: **ZENAIR CH 601 UL ZODIAC**

Maximální vzletová hmotnost 450 kg.

Podrobné technické specifikace jsou uvedeny v příloze.

Držitel typového průkazu:

Owner of Type Certificate:

CZECH AIRCRAFT WORKS, s.r.o.

Luční 1824

686 02 Staré Město

Schváleno technickou komisí LAA ČR dne:
Approval of the Technical commission of LAA CR:

9.3.2001

Typový průkaz je zaregistrován u LAA ČR pod značkou:
Type certificate is registered in LAA CR under registration sign:

ULL 07 / 2001

Ředitel technického odboru LAA ČR:
Chief Engineer of LAA CR:

Ing. Václav Chvála

Prezident LAA ČR:
President of LAA CR:

VZ. LZ
Ing. Lubos Zahradník

Letecká amatérská asociace ČR
Ke Kablu 289
102 00 Praha 10
Tel: 71085 274
č. 4



Letecká amatérská asociace ČR - Light Aircraft Association of Czech Republic

Typový průkaz - Type Certificate

Letecká amatérská asociace české republiky (dále LAA ČR) v souladu s ustanovením § 81 odst.2) zákona o civilním letectví č. 49/1997 Sb. byla dne 1.4. 1997 pověřena Úřadem pro civilní letectví vymezenými činnostmi, které souvisejí s výrobou a provozem sportovních létajících zařízení (dále SLZ) v České republice, č.j. : 1539/PI-163/97

Označení typu letecké techniky :

Designation of the type of aviation technology :

Dvoumístný, jednomotorový, aerodynamicky řízený celokovový ultralehký letoun typové označení ZENAIR CH 701

Maximální vzletová hmotnost 450 kg.

Podrobné technické specifikace jsou uvedeny v příloze.

Letouny jsou vyráběny v licenci firmy Zenair, Huronia Airport, MIDLAnd Ont., Canada

Držitel typového průkazu :

Owner of Type Certificate :

Czech Aircraft Works. s.r.o.

Luční 1824

686 02 Staré Město

Schváleno technickou komisi LAA ČR dne:
Approval of the Technical commission of LAA CR:

16.7.1996

Dne 8.11.2000 převedeno z firmy KAPPA na Czech Aircraft Works s.r.o.

Typový průkaz je zaregistrován u LAA ČR pod značkou:
Type certificate is registered in LAA CR under registration sign:

ULL - 17 / 96

Ředitel technického odboru LAA ČR :

Chief Engineer of LAA CR:

Ing. Václav Chvála

Prezident LAA ČR :

President of LAA CR:

Ing. Lubos Zára

Letecká amatérská asociace ČR
Ke Kablu 289
102 00 Praha 10
Tel. 707 52 70

č. 3



001564

FORMA 1A-05-91

SECRETARIA DE COMUNICACIONES
Y
TRANSPORTES

DIRECCION GENERAL DE AERONAUTICA CIVIL
DIRECCION TECNICA Y DE SUPERVISION
SUBDIRECCION DE INGENIERIA
DEPARTAMENTO DE INGENIERIA AERONAUTICA

CERTIFICADO DE APROBACION TIPO No. IA-0494

La Secretaría de Comunicaciones y Transportes, en base al Artículo 17, Fracción XIV de su Reglamento Interno y por conducto de la Dirección General de Aeronáutica Civil, con fundamento en los Artículos 318 y 368 de la Ley de Vías Generales de Comunicación, en vigor, expide el presente documento a favor de:

PUBLICIDAD DE ALTURA, S.A. DE C.V.

certificando que lo enunciado a continuación reúne las especificaciones mínimas aplicables para su diseño, fabricación, utilización y operación segura, en acuerdo a las Normas, Procedimientos y Regulaciones prescritas por la Dirección General de Aeronáutica Civil:

AERONAVE LIGERA MOTORIZADA

MARCA : ZENITH AIRCRAFT COMPANY
MÓDELQ: STOL CH701
No. DE SERIE: 7-3091
MATRICULA: XB-FXX

VIGENCIA: Este Certificado tiene validez indefinida a no ser que sea Cancelado, Suspendido o Revocado por la Autoridad Aeronáutica correspondiente, y no es válido sin las hojas de especificaciones anexas.

Fecha de emisión

22 - JULIO - 1994

Atentamente
SUFRACIO EFECTIVO. NO RELECCION
EL DIRECTOR GENERAL

FEDERICO CANOVAS THELIOT



證書 דגם לבלה טיק
TYPE CERTIFICATE

No. IL-124

MAKE: ZENAIR LTD., P.O.BOX 235, MIDLAND, ON., L4R 4KB CANADA

REPRESENTED BY: CONDOR AVIATION

העורום זו שמיינון לו –
certifies that the Type Design for the following
product with the operating limitations and
conditions therefor as specified in the Aviation Regulations
(Certification procedures for aircraft and
parts thereof) 1977 and the
Type Certificate Data Sheet, meets
the airworthiness requirements of TP 10141, DESIGN STANDARD FOR
ADVANCED ULTRALIGHT AEROPLANES (CANADA)

MODEL: ZENAIR STOL CH 701 (ULTRALIGHT)

This certificate and the Type Certificate
Data Sheet which is a part thereof shall
remain in effect until surrendered, suspended,
revoked, or a termination date is otherwise
established by the Head of the
Civil Aviation Administration.

העורום זה וגדילתו הנחותם של מועד
הכחדה, סחיטתם בלא כלמי כבד או מוגן
תוקף עד ביטולם הבלתיו, שגלו
או עד פקיעת תוקפו כמי שפצע נס לא זו
ראש מינהל וויזן המקבילה לאמנויות.

Date of Application 5.05.1993

תאריך יישום הבקשה

Date of Issuance 23.11.1993

תאריך תוצאת החלטה

By the direction of the Head of the
Civil Aviation Administration

באישור מנהל וויזן המקבילה לאמנויות

Signature J. GILEAD J. Gilead gil
THE MANAGER, ENG. & MFG. BRANCH CAAI

THE MANAGER, ENG. & MFG. BRANCH CAAI

EXEMPTION TO PARAGRAPH 210(1)(a) OF THE AIR REGULATIONS

Pursuant to Subsection 5.9(2) of the Aeronautics Act, I hereby authorize the operation of Zenair, models Zodiac CH 601 and STOL CH 701 aeroplanes in Canadian airspace without complying with the requirement to hold a Certificate of Airworthiness as required by paragraph 210(1)(a) of the Air Regulations, subject to the following conditions:

- (a) the aeroplane shall meet and be maintained to the standards published in TP 10141, *Design Standards For Advanced Ultra-Light Aeroplanes*;
- (b) the aeroplane shall be operated in accordance with all Air Regulations and Air Navigation Orders relating to ultra-light aeroplanes, except for the provisions contained in ANO V, No. 24, section 3, respecting the carriage of passengers, section 6, respecting operation in controlled airspace, and section 9, respecting the wearing of helmets;
- (c) the aeroplane may be used for flying training and rental but shall not be used for other commercial purposes;
- (d) the aeroplane shall be operated only by persons holding appropriate licences issued or validated by the Minister of Transport;
- (e) operation in controlled airspace and carriage of passengers other than for flying training is permissible for holders of a Private Pilot Licence-Aeroplane or higher with the appropriate class rating (single engine/land/sea);
- (f) approval from a foreign Aviation Authority is required prior to flight over its territory;
- (g) the aeroplane shall be maintained in accordance with the manufacturer's maintenance program;
- (h) all Mandatory Actions shall be completed in the manner and time frame prescribed by the manufacturer;
- (i) the aeroplane shall not be modified without prior permission from the manufacturer;
- (j) a Statement of Conformity shall be issued in respect of the aeroplane and certified by the manufacturer or an Industry Representative, as applicable; and
- (k) a copy of this Exemption and the Statement of Conformity, shall be carried onboard the aeroplane during flight time.

This Exemption continues in effect until the earliest of:

- (a) the date on which any condition specified in the Exemption is not complied with; or
- (b) the date on which this Exemption is cancelled in writing by the Minister of Transport.

Dated at Ottawa June 10, 1991.



D. Spruston
Director General
Aviation Regulation



DEPARTMENT OF TRANSPORT
TRANSPORT CANADA AVIATION GROUP
AVIATION REGULATION

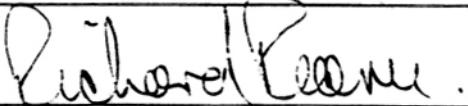
MINISTÈRE DES TRANSPORTS
GROUPE AVIATION TRANSPORTS CANADA
LA RÉGLEMENTATION AÉRIENNE

Certificate of Registration of Ultra-Light Aeroplane

This Certificate is not a Certificate of Title

Certificat d'immatriculation d'un avion ultra-léger

Ce certificat n'est pas un certificat de titre

1. Nationality and Registration Marks - Marques de nationalité et d'immatriculation	2. Manufacturer and Manufacturer's Designation of Aeroplane - Nom et désignation du constructeur de l'avion	3. Aeroplane Serial Number Numéro de série de l'avion
C - FMXN	ZENAIR LTD.	
4. Purpose - Object PRIVATE/PRIVE	STOL CH 701 (AULA)	7-1780
5. Name(s) or Owner(s) - Nom(s) du/des propriétaire(s) ZENAIR LTD.		
6. Address of Owner - Adresse du propriétaire HURONIA AIRPORT MIDLAND, ONT L4R 4K8		
7. Whereas it has been declared that the above mentioned aeroplane is not registered in any other State it is hereby certified that it has been duly entered on the Register of Canada in accordance with the Convention on International Civil Aviation dated the 7th December 1944 and the Air Regulations.		Attendu que l'avion mentionné ci-dessus n'a pas été immatriculé dans un autre état selon déclaration reçue le certifie par la présente que cet avion a été inscrit au registre du Canada conformément à la convention relative à l'Aviation Civile Internationale signée le 7 décembre 1944 et du Règlement de l'Air.
28 Feb / Fev., 1992		 Richard P. Egan
DATE OF ISSUE / DATE DE DELIVRANCE		FOR MINISTER OF TRANSPORT - POUR LE MINISTRE DES TRANSPORTS
		Scellé

SEE PINK COPY FOR CHANGE OF OWNERSHIP PROCEDURE
VEUILLEZ VOIR LA COPIE ROSE POUR EFFECTUER LE TRANSFERT DE PROPRIÉTÉ D'UN AÉRONET

REVISED LISTING OF AMATEUR-BUILT AIRCRAFT KITS

July 03, 2002

The following is a revised listing of aircraft kits that have been evaluated and found eligible in meeting the "major portion" requirement of Title 14 of the Code of Federal Regulations (14 CFR part 21), specifically section 21.191 (g). This listing is only representative of those kits where the kit manufacturer or distributor requested an evaluation by the Federal Aviation Administration (FAA) for eligibility and **SHOULD NOT** be construed as meaning the kit(s) are FAA "certified", "certificated", or "approved". There are other aircraft kits that meet the "major portion" requirement of section 21.191 (g), but those manufacturers or distributors have not requested an FAA evaluation. The placement of an aircraft kit on this list is **NOT** a prerequisite for airworthiness certification. The primary purpose of this listing is to assist FAA Inspectors/Designees and other interested individuals by eliminating the duplication of evaluations for "major portion" determination when the aircraft is presented for airworthiness certification as an "Amateur-Built Experimental." Kit manufacturers or distributors whose status is unknown are identified (?) and their address deleted.

Additional information and guidance can be found in Advisory Circular (AC) 20-27E, *Certification and Operation of Amateur-Built Aircraft*, and in AC 20-139, *Commercial Assistance During Construction of Amateur-Built Aircraft*, or by contacting your local FAA Flight Standards District Office (FSDO) or Manufacturing Inspection District Office (MIDO). Those publications and other information pertaining to amateur-built experimental aircraft are available online @ <http://av-info.faa.gov/dst/amateur/>.

<u>KIT MANUFACTURER</u>	<u>MODEL EVALUATED</u>	<u>DATE FOUND</u>	<u>ELIGIBLE</u>
Aircraft Manufacturing & Development Co. (AMD) P.O. Box 639 Eastman, GA 31023	Zodiac CH 640 Kit Assembly Manual - Zodiac CH 640, Rev. 0	05/16/01	
Zenair, Ltd. Huronia Airport Midland, Ontario Canada L4K 4K8	CH-200 Parts List dated 10/29/79	10/29/79	
	CH-300 Parts List dated 01/01/89	01/13/89	
	CH-701 Parts List dated 01/01/89	01/13/89	
Zenith Acft. Co. Box 650 Mexico, MO 65265-0650	Zodiac CH 601 Parts dated 01/04/93	05/11/93	
	Zodiac CH 601HD Parts list dated 01/04/93	05/11/93	

Zodiac CH 601HDS 05/11/93
Parts List dated
01/04/93

Zodiac CH 601 XL 03/28/01
Drawings & Manuals
List dated 03/27/01

STOL CH 701 05/10/93
Parts List dated
10/09/92

STOL CH 801 03/28/01
Construction Manuals
List dated 03/27/01

END OF LISTING

July 03, 2002

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION SPECIAL AIRWORTHINESS CERTIFICATE		
A	CATEGORY/DESIGNATION EXPERIMENTAL PURPOSE OPERATING AMATEUR-BUILT AIRCRAFT	
B	MANUFACTURER NAME NA ADDRESS NA	
C	FLIGHT FROM NA TO NA	
D	N-6128Q BUILDER ROGER DUBBERT DATE OF ISSUANCE 3-30-98 OPERATING LIMITATIONS DATED 3-30-98	SERIAL NO. 7-3707 MODEL CH 701 STOL EXPIRY UNLIMITED ARE A PART OF THIS CERTIFICATE
E	SIGNATURE OF FAA REPRESENTATIVE <i>Emery E. Neff Jr.</i> EMERY E. NEFF, JR.	DESIGNATION OR OFFICE NO. DARF501247CE
Any alteration, reproduction or misuse of this certificate may be punishable by a fine not exceeding \$1,000 or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.		

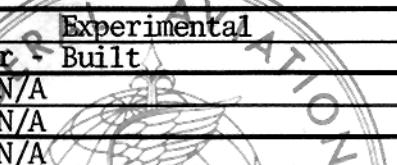
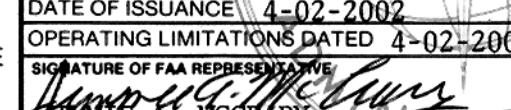
FAA FORM #130-7 (10/82)

SEE REVERSE SIDE

REGISTRATION NOT TRANSFERABLE

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF AIRCRAFT REGISTRATION		This certificate must be in the aircraft when operated.
NATIONALITY AND REGISTRATION MARKS N 6128Q	AIRCRAFT SERIAL NO. 73707	
MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT DUBBERT ROGER CH 701 STOL ICAO Aircraft Address Code: 51774653		
I S S U E D T O	DUBBERT ROGER 1405 MOCKINGBIRD DR MEXICO MO 65265-1625	This certificate is issued for registration purposes only and is not a certificate of title. The Federal Aviation Administration does not determine rights of ownership as between private persons.
INDIVIDUAL		
It is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with the Federal Aviation Act of 1958, and regulations issued thereunder.		
DATE OF ISSUE March 20, 1998	<i>John R. Neff</i> ADMINISTRATOR	 U.S. Department of Transportation Federal Aviation Administration

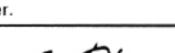
AC Form 8050-308/97 Supersedes previous editions

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION SPECIAL AIRWORTHINESS CERTIFICATE			
A	CATEGORY/DESIGNATION <u>Experimental</u>		
	PURPOSE <u>Amateur - Built</u>		
B	MANU- FACTURER	NAME <u>N/A</u>	
		ADDRESS <u>N/A</u>	
C	FLIGHT	FROM <u>N/A</u>	
		TO <u>N/A</u>	
D	N- 96017 		SERIAL NO. <u>6-4435</u>
	BUILDER <u>Roger Dubbert</u>		MODEL <u>CH601 XL</u>
E	DATE OF ISSUANCE <u>4-02-2002</u>	EXPIRY <u>Unlimited</u>	
	OPERATING LIMITATIONS DATED <u>4-02-2002</u>	ARE A PART OF THIS CERTIFICATE	
	SIGNATURE OF FAA REPRESENTATIVE 	DESIGNATION OR OFFICE NO.	
	<u>JIMMIE A. MCCRARY</u>	<u>DARF240017CE</u>	
Any alteration, reproduction or misuse of this certificate may be punishable by a fine not exceeding \$1,000 or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.			

FAA FORM 8130-7 (10-82)

SEE REVERSE SIDE

REGISTRATION NOT TRANSFERABLE

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF AIRCRAFT REGISTRATION		This certificate must be in the aircraft when operated.
NATIONALITY AND REGISTRATION MARKS N 9601Z	AIRCRAFT SERIAL NO. 6-4435	
MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT DUBBERT ROGER ZODIAC CH601XL ICAO Aircraft Address Code: 53257271		
ISSUED TO	DUBBERT ROGER D 1405 MOCKINGBIRD DR MEXICO MO 65265-1625	This certificate is issued for registration purposes only and is not a certificate of title. The Federal Aviation Administration does not determine rights of ownership as between private persons.
INDIVIDUAL		
It is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with the Federal Aviation Act of 1958, and regulations issued thereunder.		
DATE OF ISSUE March 20, 2001	 Paul D. Dohmen ADMINISTRATOR	
		U.S. Department of Transportation Federal Aviation Administration

It is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with the Federal Aviation Act of 1958, and regulations issued thereunder.

DATE OF ISSUE
March 20, 2001

- ADMINISTRATOR



U.S. Department
of Transportation

Federal Aviation
Administration