

# FREEDOM OF INFORMATION LAW 2007 APPLICATION



Please read the information for applicants on the reverse before you fill in this form.

Title of Public Authority: MOSQUITO RESEARCH CONTROL

**Details of applicant:**

Surname (Family Name)			
First Names:		Mrs <input type="checkbox"/> Ms <input type="checkbox"/> Miss <input type="checkbox"/> Other <input type="checkbox"/>	
Postal address:		Postal code:	
Home phone number:		Work phone number:	
Email:		Fax:	



**Details of Request:**

I request access to record(s) covering matters which are: <input type="checkbox"/> Personal <input checked="" type="checkbox"/> Non personal	<b>Office use only</b> Identity verified? (personal information only) (Please refer to Personal Information over page) <input type="checkbox"/> Yes <input type="checkbox"/> No Type of identification:
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The record(s) I request are: (attach additional pages if necessary)

- ① I want to know the approved altitude of the MRCU's spray plane.
- ② I want a copy of any document which logs the altitude of the plane that shows that the plane may have flown too low last year (Jan-Dec 2007)
- ③ I want to know if any disciplinary action has ever been taken against a pilot for low flying and what the action was (I do not need names)

I wish a copy(ies) of the record(s) in the following format:

<input checked="" type="checkbox"/> photocopy	<input type="checkbox"/> diskette
<input type="checkbox"/> compact disc	<input type="checkbox"/> transcript
<input type="checkbox"/> other (please specify)	Number of copies required:

The applicant must complete this section (tick appropriate box):

<input type="checkbox"/> I require a copy of the record(s)	<input checked="" type="checkbox"/> I wish to inspect / view / listen to the record(s)
Please sign _____	Date _____



*Marco Giglioli Centre  
99 Red Gate Road  
P.O. Box 486  
Grand Cayman KY1-1106  
Cayman Islands*

*Tel: (345) 949-2557  
Fax: (345) 949-8912*

*Your Ref:*  
*Our Ref:* MRCU FOI 1/09

CAYMAN ISLANDS  
GOVERNMENT

## MOSQUITO RESEARCH & CONTROL UNIT

### Response to Question 1 of 2009 Under *Freedom of Information*

4 February, 2009

The question is in three parts. Please refer to attached copy.

Part one states: "I want to know the approved altitude of the MRCU's spray plane."

The substantive answer is:

**The approved altitude for MRCU aircraft is between ground level and 12,000 feet. While there is an approved maximum level of 12,000ft, there is no prescribed minimum level.**

However, in the interest of completeness, further explanation is provided below.

#### **1. Aircraft Flight Manual**

Please see attached excerpt from manufacturer's Aircraft Flight Manual, Section 1 Limitations.

##### ***Altitude Limitations***

***Maximum approved altitude is 12,000 feet. [No prescribed minimum altitude]***

***FAA Approved 10/28/05***

## 2. FAA Aircraft Type Certificate

Please see attached excerpt from Aircraft Type Certificate, page 16 of 42.

**Maximum Operating Altitude      12,000 feet. [No prescribed minimum level]**

## 3. Aerial Spraying Protection Law (1974)

Please see attached copy of Legislation. Under Memorandum of Objects and Reasons:

***"Spraying from the air for the control of mosquitoes is a hazardous operation since, in order that it may be effective and reasonably economic, it must be carried out in a dim light at very low level."***

## 4. Exemption from Air Navigation (Overseas Territories) Order 1989

**(Exemption under Article 95)**

Please see attached copy of exemption from low flying provisions of the Air Navigation (Overseas Territories) Order 1989, Schedule 13/5.1 Low Flying, as issued by H.E. The Governor of the Cayman Islands.

## 5. Pilot Authorisation

In addition to the provisions of points 1 to 4 listed above, each pilot approved by CI CAA to be an operational pilot for MRCU is issued an individual authorisation to conduct aerial application flights, including low level flying.

Please see attached sample copy of letter issued to Chief Pilot, Richard Clough, by CI CAA, which reads in part:

***"In that regard, you are hereby authorized to conduct aerial application flights in compliance with the terms and provisions of MRCU's Aerial Application Manual."***

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Part two of the question set states: "I want to a copy of any document which logs the altitude of the plane that shows the plane may have flown too low last year Jan-Dec 2007."

The substantive answer is:

**As there is no prescribed minimum altitude for MRCU operational flights, as indicated above, there can consequently be no such instance of an MRCU aircraft having "flown too low."**

## 6. Aircraft Flight Log and Report

However, in the interests of completeness once again, please see attached sample copy of aircraft flight log (map of Red Bay to Bodden Town) plus accompanying report of an operational flight conducted on 26<sup>th</sup> June 2008. It will be seen that the average height of this aerial sortie was recorded as 91 feet.

It should be noted that such recording of aerial operations is not required by regulatory authorities or by legislation, but is undertaken by the department by way of post-flight analysis in order to maximise efficiency of operations.

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Part three of the question set states: "I want to know if any disciplinary action has ever been taken against a pilot for low flying and what the action was."

The substantive answer is:

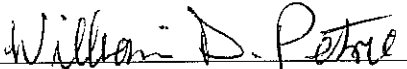
**As there is no prescribed minimum altitude for MRCU operational flights, there can consequently be no such instance of any approved pilot being disciplined for "low flying".**

## 7. MRCU Low Flying Policies

Again, in the interests of completeness and disclosure of information, please see attached copy of a voluntary departmental policy document outlining low flying policies, as well as avoidance measures of (7) Restricted Areas and (8) Sensitive Areas, plus additional information. It should be noted that this policy document is an active document, and may be amended periodically by the Director MRCU and/or Chief Pilot as needs dictate.

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It will be seen from the foregoing that there is no approved low level altitude prescribed for MRCU operational flights. The actual flight level utilised by any individual pilot on any given sortie is dependent on such factors as the nature of the operation being conducted, the topography of the area being treated, light conditions, weather conditions and any other factors determined by the Pilot In Command, in order to ensure the highest level of safety procedures and to maximise the efficiency and effectiveness of mosquito control operations in the Cayman Islands.

  
Dr. William D. Petrie  
Director, MRCU

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**THRUSH AIRCRAFT INC  
MODEL S2RHG-T65 DUAL COCKPIT  
SERIAL NUMBER T65HG-013DC AND SUBSEQUENT  
AIRPLANE FLIGHT MANUAL**

**AIRSPPEED LIMITATIONS**

Limits	Speed (MPH)	Remarks
Never Exceed – Vne	220	Basic Airplane Limit
Max. Structural Cruising – Vno	187	Do Not Exceed in Turbulent Air
Maneuvering Speed – Va	167	No Full or Abrupt Control Movements Above this Speed.
Max. Flap Extended Speed – Vfe	157	Limit with Flaps Extended
Max. Dump Speed	140	Limit for Hopper Dump
Max. Crosswind Velocity	20	Max. Demonstrated Limit During Takeoff/Landing.

All airspeeds are given in Calibrated Air Speeds.

**ALTITUDE LIMITATIONS**

Maximum approved altitude is 12,000 feet.

**FLIGHT LOAD FACTORS**

Design Load Factors-Flap Up – 3.3 Positive, 1.3 Negative

Design Load Factors-Flap Down – 2.0 Positive, 0.0 Negative

**WEIGHT AND CENTER OF GRAVITY**

**NOTE**

**DATUM IS THE LEADING EDGE OF THE WING.**

Maximum Weight – 10,500 pounds

Maximum Landing Weight – 7,600 pounds

Minimum Weight – 5,000 pounds

C.G Range:

- ♦ Forward Limit at 7,600 pounds and below is 22.5 inches AFT of Datum.
- ♦ Forward Limit at 10,500 pounds is 26.0 inches AFT of Datum with straight-line variation to 7,600 pounds at 22.5 inches.
- ♦ AFT Limit at all weight is 28.0 inches.

**NOTE**

**It is the responsibility of the airplane owner and the pilot to insure that the airplane is properly loaded. See the Weight and Balance Sheet for loading information.**

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23.937(-7)	23.1111(-7)	23.1557(-14)
23.951(-15)	23.1121(-7)	23.1583(-10)
23.955(-7)	23.1141(-14)	23.1587(a)(-7)

Airspeed Limits (CAS)

Vne (Never Exceed)	220 m.p.h. (191 knots)
Vp (Maneuvering)	167 m.p.h. (145 knots)
Vno (Max. Structural Cruising)	187 m.p.h. (163 knots)
Vfe (Flap Extended)	157 m.p.h. (137 knots)

C.G. Range

Forward Limit 7600 pounds and below is +22.5 inches aft of datum  
 Forward limit at 10500 pounds is 26 inches aft of datum with straight line variation to 7600 pounds at 22.5 inches.  
 Aft Limit at all weights is +29.0 inches aft of datum.  
 Datum is the leading edge of the wing.

Maximum Takeoff Weight

10,500 lbs.

Maximum Landing Weight

7,600 lbs.

Minimum Weight

5,000 lbs.



Maximum Operating Altitude

12,000 feet

Number of Seats

1 (+89)  
 1 (+127)

Maximum Cargo Load

See weight and balance data.  
 Maximum cargo compartment, 200 lbs. (+120).  
 Maximum hopper load, 4000 lbs. (+29.9).

Fuel Capacity

228 gallon usable, one 115 gallon tank in each wing, tanks interconnected. See NOTE 1 for data on unusable fuel.

Oil Tank Capacity

11 quarts - usable oil tank capacity 6 quarts.

Control Surface Movements

Elevator	Up $27^{\circ} \pm 1^{\circ}$	Down $17^{\circ} \pm 1^{\circ}$
Elevator Tab	Up $8^{\circ} \pm 1^{\circ}$	Down $22^{\circ} \pm 1^{\circ}$
Rudder	Left $24^{\circ} \pm 1^{\circ}$	Right $24^{\circ} \pm 1^{\circ}$
Aileron	Up $21^{\circ} \pm 1^{\circ}$	Down $17^{\circ} \pm 1^{\circ}$
Flaps		Down $15^{\circ} \pm 1^{\circ}$

Serial Numbers Eligible

T65-002DC thru T65-012DC, and T65HG-013DC and subsequent.  
 For T65HG-011 and subsequent see NOTE 25.

Required Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the aircraft for certification. This equipment must include for s/n T65-002DC thru T65-012DC Ayres Corporation Airplane Flight Manual approved June 8, 1988, and Supplement for Restricted Category Operation approved June 8, 1988, or for s/n T65HG-013DC and subsequent, Thrush Airplane Flight Manual approved October 28, 2005, or later approved versions.

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#### MEMORANDUM OF OBJECTS AND REASONS

Spraying from the air for the control of mosquitoes is a hazardous operation since, in order that it may be effective and reasonably economic, it must be carried out in a dim light at very low level. Radio masts, crane jibs and other obstructions appearing sporadically all over the Islands have greatly added to the dangers and it is sought to control this by ensuring that certain obstructions are so marked as to give proper warning to the pilots of aircraft engaged in this dangerous work.

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**CAYMAN ISLANDS**  
**GOVERNMENT NOTICE**

**OFFICE OF THE GOVERNOR**  
George Town, Grand Cayman  
(DATE)

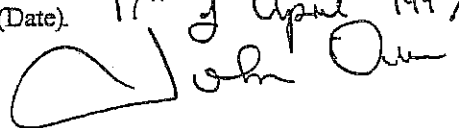
No. \_\_\_ of 1997

**THE AIR NAVIGATION (OVERSEAS TERRITORIES) ORDER 1989**

(Exemption under Article 95)

I JOHN W. OWEN, Governor of the Cayman Islands, in exercise of the powers vested in me by virtue of Article 95 of the above Order and of every other power in that behalf me enabling hereby exempt from the provision of Rule 5 (1) of Section II of the Thirteenth Schedule of the above Order all Government owned or leased aircraft (fixed wing or helicopter) while being used in the service of the Mosquito Research and control Unit of the Government.

Given at George Town this (Date).

17<sup>TH</sup> of April 1997  


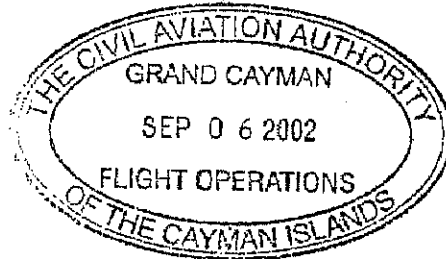
GOVERNOR



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Mr. Richard Clough  
Chief Pilot  
Mosquito Research & Control Unit  
P.O. Box 486 GT  
Grand Cayman




6<sup>th</sup> September 2002

Reference: Richard Clough – Authorization to conduct Aerial Application flights

Dear Sir,

You are hereby notified that you have been deemed qualified, having met the requirements of MRCU's Aerial Application Manual, sections 4.16 (b) and 4.16 (c), in accordance with Article 31 (4) of the Air Navigation (Overseas Territories) Order 2001. In that regard, you are hereby authorized to conduct aerial application flights in compliance with the terms and provisions of MRCU's Aerial Application Manual.

Yours faithfully,

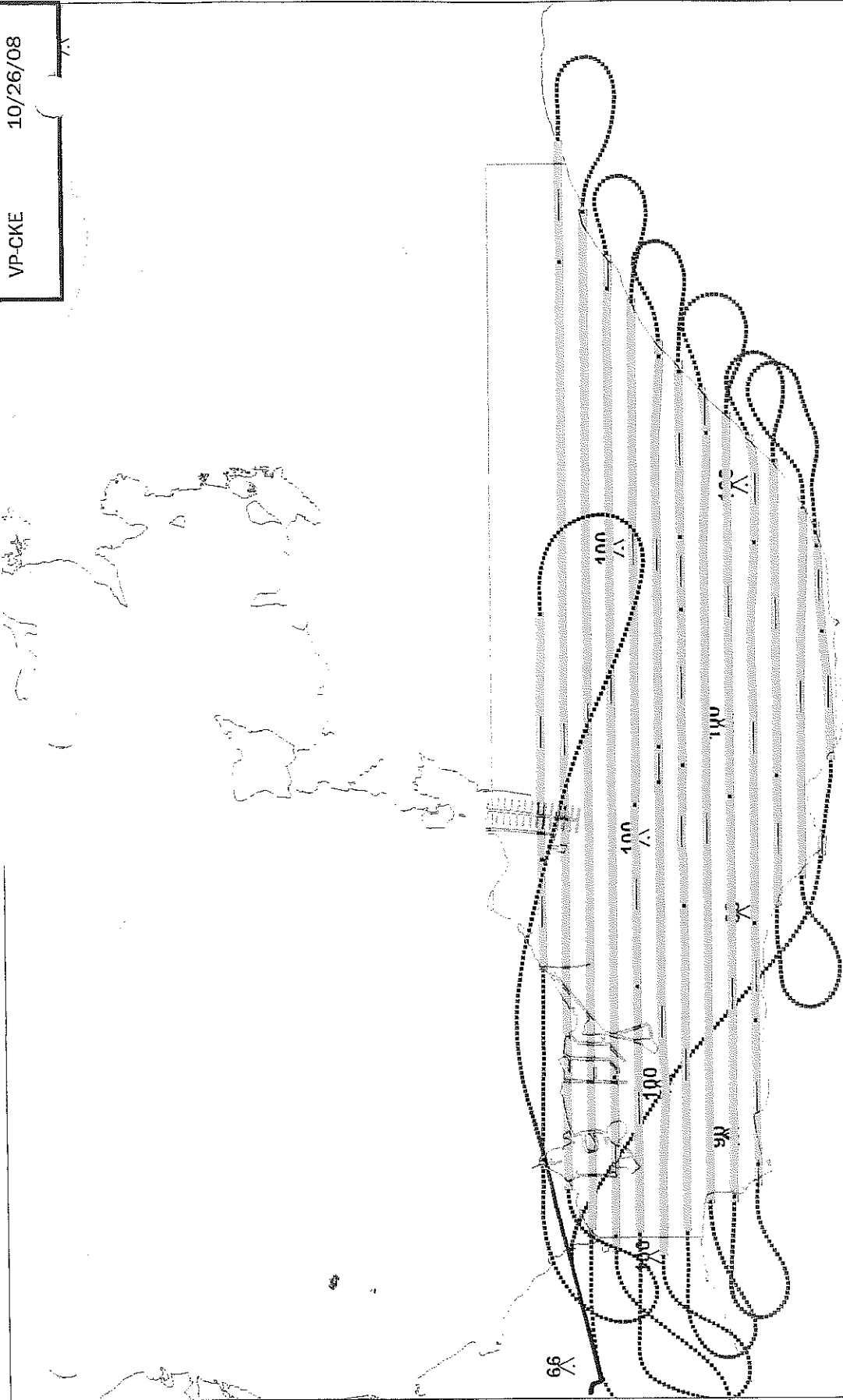
  
David Frederick  
D/Director of Civil Aviation

Civil Aviation Authority of the Cayman Islands

P.O. Box 10277 APO, Grand Cayman, Cayman Islands, Tel: (345) 949-7811, Fax: (345) 949-0761, Email: caacigcm@candw.ky

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VP-CKE 10/26/08



**LEGEND**

	Release Positions
	Area of Max Deposition
	Block Edges
	045@10Kts 090@03Kts
0.0	Nautical Miles
	2.0

Cayman 10/26/08 Report

Sortie: 1  
Pilot: JM  
Co Pilot:  
Aircraft: VP-CKE  
TakeOff: 10/26/08 17:52:11  
Landing: 10/26/08 18:52:23  
Spray On: 10/26/08 18:02:35  
Spray Off: 10/26/08 18:45:47  
Emmission Time: 029:00  
Area: 8304.3 Acres  
Volume: 0.0  
App Rate: 0.0  
Swath 982.0  
Speed 146.1  
Avg Height 91  
Avg Boom Press 0.0

Nozzle RPMS :  
01 02 03 04 05 06 07 08 09 10  
0 0 0 0 0 0 0 0 0 0

Document created June 25th 2007

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## **MRCU LOW FLYING POLICIES**

### **1 Applicability**

Pilots shall be conversant with & in compliance with the department's LOW FLYING POLICIES.

### **2 Special Purpose Operations**

Pilots may be tasked with carrying out the following aerial work operations (in this document termed 'Special Purpose Operations'):

- Mosquito control flights,
- Wildfire control flights,
- Oil spill control flights,
- Search & Rescue flights
- Damage Assessment flights (post-storm for NHC)
- Aerial Photography flights (for various government agencies)

MRCU SPECIAL PURPOSE OPERATIONS generally involve low flying activities. To facilitate these operations appropriately qualified pilots are, under certain circumstances, exempt from AN(OT)O Schedule 13 - Rules of the Air (in this document termed "low flying rules")

In general terms pilots are expected to be mindful of the importance of both public support & regulatory acceptance for MRCU special purpose operations.

When conducting special purpose operations the PIC shall ensure that the aircraft's flight path from take-off to landing is "data-logged" & downloaded post-flight in accordance with established procedures.

### **3 Non-Exemption**

Any flight not listed in paragraph 2 above shall be conducted in its entirety in compliance with VFR flight rules. This includes any Maintenance Test Flight, ferry or positioning flight.

### **4 Public Complaints**

Pilots are advised that members of the public in general & tourists in particular are unfamiliar with MRCU's low flying operations.

Historically public complaints filed against MRCU aerial operations can generally be categorized as follows:

Those pertaining to:

- The aerial dispersal of toxic substances (pesticides etc);
- Low flying; and
- Noise

Procedures for dealing with public complaints are detailed in Chapter 84 of the Operations Manual (formerly AAM).

Further to the abovementioned [AAM Chapter 84] procedures, any complaints involving low flying and/or noise should be reported to the Chief Pilot.

### **5 Avoidance Measures**

Measures to be taken by pilots to minimize/avoid generating unnecessary public complaints include:

- Complying with LOW FLYING POLICIES;
- Careful pre-flight planning of transit routes, flight patterns etc;
- Careful in-flight reconnaissance (from a safe altitude) of treatment/work areas;
- Using personal discretion & common sense when maneuvering during flight;

## 6 Prohibitions

The following prohibitions are current:

- Flying directly over the **CUC PLANT** (compound) located on North Sound Road is prohibited.
- Flying within 1 km of the **TURTLE FARM** located at NW Point is prohibited.
- Flying within 1 km of any **CRUISE SHIP** (whether anchored or under way) is prohibited.
- Flying directly over the **AIRPORT TERMINAL** at low altitude is prohibited.
- **BEAT-Up's** of persons, buildings, vehicles or vessels in any form whatsoever are prohibited.

## 7 Restricted Areas

Except with the explicit permission of the Chief Pilot, flying to the west of the West Bay Road between Dolphin Point and Georgetown (along the **SEVEN MILE BEACH**) below 500 feet is prohibited. This includes the Harbor & Cruise Ship off-shore mooring areas.

## 8 Sensitive Areas

Pilots shall, whenever possible, avoid sensitive areas. These include Hospitals, clinics & schools (during hours of operation). Also business districts, shopping centers during work or busy periods etc.

## 9 Revision Procedure & Distribution

The department's LOW FLYING POLICIES shall be expanded and/or amended as & when required.

The Chief pilot is responsible for:

- Ensuring each MRCU pilot is provided with the latest edition of the LOW FLYING POLICY DOCUMENT.
- Ensuring that a copy of the LOW FLYING POLICY DOCUMENT is posted on the Pilots Office Notice Board