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LIST OF EFFECTIVE PAGES

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Long's Peak Air Charter, LLC
RVSM MAINTENANCE PROGRAM
General Maintenance

- The CL-604 Structural Repair Manual will be consulted for guidance on the test flight.
- All required maintenance logbook entries are made and corrective actions recorded.
- The RVSM non-compliant placard will be removed from the aircraft.

NOTE: A functional flight test may only be needed after repairs or modifications are made that deem to necessitate such testing. This may be accomplished through monitoring height-keeping performance.

HEIGHT KEEPING ERRORS

The incidence of height keeping errors, which can be tolerated in an RVSM environment, is very small. Errors, which must be reported and investigated, are:

- Total Vertical Error (TVE) equal to or greater than +/- 300 ft (90 m)
- Altimetry System Error (ASE) equal to or greater than +/- 245 ft (75 m)
- Assigned Altitude Deviation (AAD) equal to or greater than +/- 300 ft (90 m)

If at any time during RVSM Operations a height keeping error occurs, the pilot in command will immediately notify the RVSM Responsible Person by completing the *Height Keeping Error Report (Form RVSM-01)* which can be found behind the RVSM Forms tab. The

RVSM Responsible Person will report the occurrence to the FAA within seventy two (72) hours with initial analysis of causal factors and measures to prevent further events.

The RVSM Responsible Person will ensure immediate action is taken to rectify the conditions which caused the error. If the error was caused by a malfunction of aircraft equipment, the aircraft is now considered RVSM non-compliant and the actions specified in the *REMOVAL FROM/RETURN TO SERVICE* section will be taken. If the altitude deviation was caused by pilot error, the pilot will be restricted from flying into RVSM airspace until the necessary training is taken to prevent further height keeping incidents.

MINIMUM EQUIPMENT LIST

Long's Peak Air Charter, LLC will utilize the current FAA MMEL as its MEL.

ADDITIONAL MAINTENANCE PRACTICES

The air data computers provide altitude information to both the autopilot system and the transponder system in both normal and abnormal situations via the data bus. Bombardier Aerospace will be contacted if further technical details are needed on the operation of the altimetry, automatic altitude control, and transponder systems.

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Long's Peak Air Charter, LLC
RVSM MAINTENANCE PROGRAM
General Maintenance

**BASIC MONITORING
PROCEDURES FOR EUROPE**

Operators have the option of overflying an HMU or using the GMS.

HMU PREFLIGHT PROCEDURES

U.S. operators planning to complete monitoring using an HMU located in Europe should complete the following steps:

- Operator obtains FAA Flight Standards field office RVSM airworthiness and operational approval for the aircraft to be monitored in European airspace. (Airframe and operational approval information will be forwarded to the U.S. RVSM Approvals Database through the AFS Program Tracking and Reporting Subsystem (PTRS)).
- Operator completes the "Application for Monitoring" and faxes it to U.S. Operator/RVSM Approvals Database and Monitoring Coordinator.

If it has not already been accomplished, the U.S. Operator/RVSM Approvals Database and Monitoring Coordinator will coordinate the operator's FAA RVSM Approvals Database information with Eurocontrol.

If not previously accomplished, the operator also faxes USC Form 2 to the AMN User Support Cell.

HMU IN FLIGHT PROCEDURES

The HMU is a passive ground based system that measures aircraft height keeping over an approximately circular area. Each system consists of a set of ground stations arranged as a central site with four additional receivers

arranged in a square. Each site receives aircraft SSR replies (Modes A, C and S) from which the 3D position of the aircraft is derived. Using meteorological information and the Mode C/S height data the altimetry system error is calculated.

The HMUs are operating at the following locations:

Linz in Austria

[centre 48°12'N, 014°18'E]

Nattenheim in Germany

[centre 49°57'N, 006°28'E]

Geneva in Switzerland

[centre 46°22'N, 005°56'E]

ATS route segments within HMU coverage can be determined by considering a circle with 45 NM radius around the center coordinates given above. Up-to-date information can be obtained from the RMA.

For a successful measurement by an HMU, it is required that the aircraft is in level flight for approximately 5 minutes, between FL290 and FL410 (inclusive) within the coverage of the HMU.

**Monitoring Flight Results and
Eurocontrol Database Information**

Operators may consult the Eurocontrol RVSM Web Site or contact the User Support Cell (see *General Information*) to ascertain that the information stored about the aircraft is correct and to identify whether the aircraft have been monitored and acceptable performance has been demonstrated.

NORTH ATLANTIC (STRUMBLE) HEIGHT MONITORING UNIT

In the North Atlantic Region, monitoring can be completed by overflying ground-based Height Monitoring Units (HMUs). An HMU is located near the Strumble (STU) VOR below the centerline of UL9. The horizontal coverage areas for the Strumble HMU is a 13.8 nm radius circle centered on position N51° 56' 00" W004° 40' 00". In the vertical dimension, the coverage is from FL 290 to FL 410 inclusive. The site is unmanned and designed to operate continuously.

While straight and level flight through the area of coverage should normally result in successful monitoring, operators of aircraft making a flight with the specific intention of getting monitored should, where possible, plan to meet the requirements outlined in the following paragraphs.

Strumble HMU Pre-Flight Procedures

Operators complete and fax a copy of the "Application for Monitoring" form to the U.S. Operator/Aircraft RVSM Approvals Database and Monitoring Coordinator.

Operators proposing to divert from an optimum route in order to fly over an HMU are strongly advised to call the Strumble HMU status line (see *General Information*) for HMU serviceability information. Every effort will be made to ensure that the promulgated information is accurate; however, operators should note that the equipment may become unserviceable at short notice.

Aircraft for monitoring by an HMU should be flight planned to route via

STU. Dispatchers should ensure that Item 18 of the flight plan (CA48) includes both aircraft registration (if it is not already included in Item 7) and "RMK/HMU FLT STU".

Strumble HMU In-Flight Procedures

For overflights of the Strumble HMU, crews should aim to fly straight and level while within the coverage area of the respective HMU. Failure to do so may invalidate the result. Prior to an overflight of the Strumble HMU, crews should transmit "... **for HMU Flight**" to London Control on initial contact. Operational requirements permitting, the controller will endeavor to do his/her best to allow the aircraft to route through the HMU coverage area in straight and level flight.

The HMU is capable of tracking many aircraft simultaneously. To that end, provided the above procedures are followed, aircraft height will be monitored and there will, therefore, be no necessity to carry out a second consecutive overflight.

Strumble HMU Post-Flight Procedures

Operators wishing to ascertain the result of the overflight may fax a request to the NAT Central Monitoring Agency (CMA) (see *General Information*). Any request for information regarding the result of monitoring will be more speedily dealt with if the Mode S or Mode A codes and approximate time of overflight are included in the enquiry.

RVSM EQUIPMENT SUMMARY

RVSM EQUIPMENT				
Qty	Manufacturer	Model No.	Part No.	Type of Equipment
2	Collins	ADC-850E	822-0842-421	Air Data Computers
2	Collins	TDR-94D	622-9210-008	Mode S Transponders
1	Collins	FCS-4000	622-9814-730	Autopilot System with Altitude Hold
4	Collins	10C-4000	-	AFCS Cards

TCAS				
Qty	Manufacturer	Model No.	Part No.	Type of Equipment
1	Collins	TTR-2100	822-2911-001	TCAS II with Change 7

NAVIGATION EQUIPMENT				
Qty	Manufacturer	Model No.	Part No.	Type of Equipment
2	Collins	FMC-6000	822-0868-071	Area Nav FMS
2	Collins	FMC-6000	822-0931-003	FMS-6000 with GPS
3	Litton	LTN-101	856-0075-01	IRU

COMMUNICATION EQUIPMENT				
Qty	Manufacturer	Model No.	Part No.	Type of Equipment
2	Collins	HF-9031	822-0101-002	HF Comm
1	Honeywell	AIRSAT	153-017311-01	SATCOM
1	Avtech	CSD-714	1200008-001	SELCAL
2	Collins	VHF-422	822-1116-101	VHF Comm with 8.33 kHz Channel Spacing

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