



Department of Transport

# Supplemental Type Certificate

**This approval is issued to:**

BLR Aerospace, LLC.  
3102 100th Street SW  
Everett, Washington  
United States of America 98204

**Number:** SH01-28

**Issue No.:** 2

**Approval Date:** April 24, 2001

**Issue Date:** September 29, 2010

**Responsible Office:**

Pacific

**Aircraft/Engine Type or Model:**

Bell 204B, 205A-1, 205B, 212, 412, 412 CF, 412 EP

**Canadian Type Certificate or Equivalent:**

H-104 (Bell 205B); H-86 (Bell 212, 412, 412 CF, 412 EP);  
FAA TCDS H1SW (Bell 204B, 205A-1)

**Description of Type Design Change:**

Installation of BLR tail boom strakes per FAA STC SR00798SE

**Installation/Operating Data,  
Required Equipment and Limitations:**

Installation of Boundary Layer Research (BLR) tail boom strake system is to be carried out in accordance with FAA approved BLR Installation Drawing List No. BL-UH1H-02, Revision D, dated September 10, 2001\* and BLR Installation Manual No. BH200INS, Revision D, dated September 10, 2001\*. These tail boom strakes are to be fabricated in accordance with FAA approved BLR Manufacturing Drawing List No. BL-UH1H-01, Revision D, dated September 10, 2001\*.

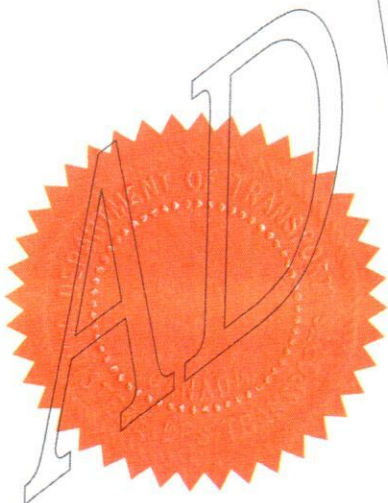
Modified rotorcraft must be operated in accordance with one of the following FAA approved copy of BLR Rotorcraft Flight Manual Supplements (RFMS):

- a. BLR RFMS No. RFMS-BH205-1A, Revision B, dated January 08, 2002\*, covering the basic BLR strake installation on all of the helicopter models listed in this STC
- b. BLR RFMS No. RFMS-BH-205-2a, Revision IR, dated March 12, 2004\*, covering the basic BLR strake installation plus a performance improvement for those Model 205A-1 helicopters.
- c. BLR RFMS No. RFMS-BH205-3a, Revision IR, dated March 12, 2004\*, covering the basic BLR strake installation plus a performance improvement for those Model 204B helicopters.

(\* or later FAA approved revisions)

-- End --

**Conditions:** This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.



*Henry Wong*  
Henry Wong  
For Minister of Transport



# Supplemental Type Certificate

This approval is issued to:

BLR Aerospace, LLC  
3102 100<sup>th</sup> Street SW  
Everett, Washington  
United States of America 98204

**Number:** SH08-55

**Issue No.:** 3

**Approval Date:** October 30, 2008

**Issue Date:** August 26, 2010

**Responsible Office:**

Pacific

**Aircraft/Engine Type or Model:**

BELL 204B, 205A, 205A-1, 205B\*, 212

**Canadian Type Certificate or Equivalent:**

BELL 205B H-104  
BELL 212 H-86  
BELL 204B, 205A, 205A-1 H1SW

**Description of Type Design Change:**

Fabrication of BLR FastFin System in Accordance with BLR MDI Document

**Installation/Operating Data,  
Required Equipment and Limitations:**

Fabrication and Installation of Boundary Layer Research (BLR) FastFin System must be in accordance with BLR Master Drawing List and Installation Instructions specified in FAA Approved Model List (AML) No. SR01865SE, Rev. IR, dated July 31, 2009, or later FAA-approved revisions.

Maintenance must be in accordance with Instructions for Continued Airworthiness (ICA) document number BLR-212FF-950, Rev. B, dated September 4, 2009.

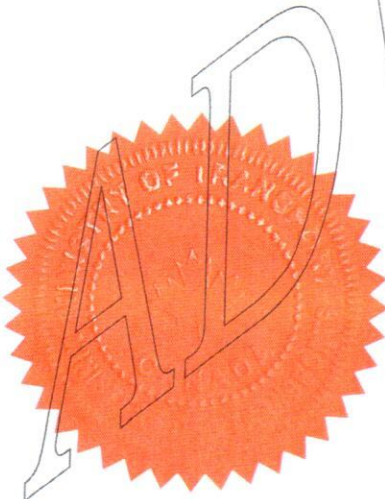
**Required Equipment:**

Modified rotorcraft must be operated in accordance with BLR Flight Manual Supplement specified in FAA AML No. SR01865SE, Rev. IR, dated July 31, 2009, or later FAA-approved revisions.

(\*) Models added this issue

— End —

**Conditions:** This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.



Michael Chan  
For Minister of Transport





**ROTORCRAFT  
FLIGHT MANUAL SUPPLEMENT**

**Bell Medium Helicopters:**

**Model 212 Series**

**With Increased Weight Altitude Temperature Limit  
212-704-129 & 212-704-153**

**Equipped with**

**BLR Patented FastFin<sup>®</sup> System**

**A/C Reg #:** C-GUWX

**A/C Serial #:** 30925

This supplement shall be attached to the Model 212 Series Flight Manual when the BLR Patented FastFin<sup>®</sup> System has been installed.

Information contained herein supplements information of the basic Flight Manual and Flight Manual Supplement, BHT-212-FMS-35. For Limitations, Procedures and Performance Data not contained in this supplement, consult the basic Flight Manual or Flight Manual Supplement, BHT-212-FMS-35.

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FAA Approved: 27 Sept 2011  
Rev IR



### LOG OF APPROVED REVISIONS

Original .....IR 27 Sept 2011

FAA APPROVED:  DATE: 9/27/2011

*for* MANAGER

AIRCRAFT CERTIFICATION OFFICE  
FEDERAL AVIATION ADMINISTRATION  
SEATTLE, WA 98055-4056

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Rev IR

## Section 2

### **NORMAL PROCEDURES**

NOTE ALL ITEMS REMAIN AS IN BASIC RFM EXCEPT THE FOLLOWING:

#### **2-3-B Exterior Check**

- **Tailboom Strakes - Inspect for damage, deformation and security of attachment**
- **Vertical Fin Structure and FastFin Fairings – Inspect for damage, deformation and security of attachment**

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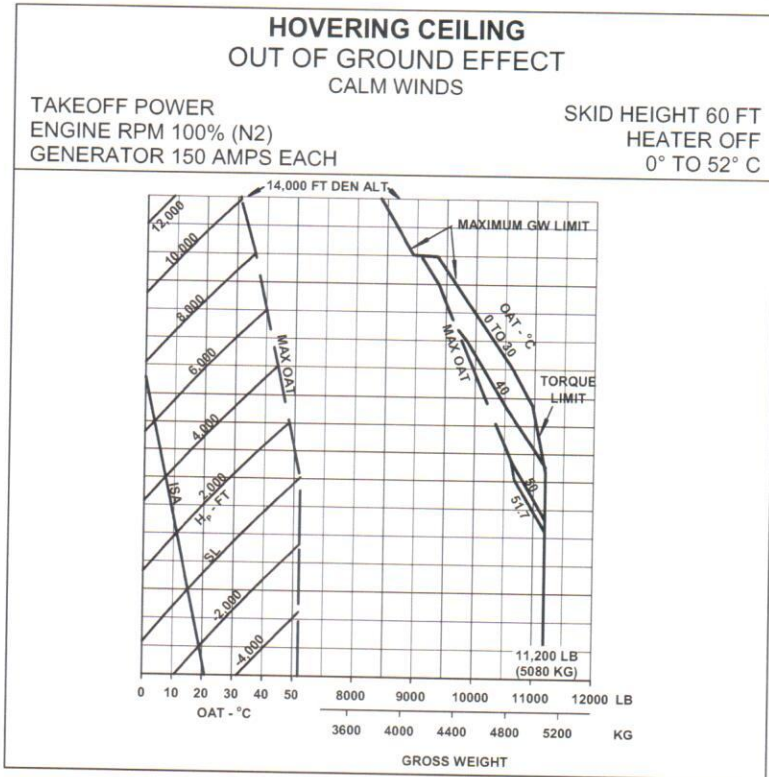
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Rev IR

Page 5 of 9

**Section 4**

**PERFORMANCE**

NOTE ALL ITEMS REMAIN AS IN BASIC RFM SUPPLEMENT 35 EXCEPT THE FOLLOWING:



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## Section 5

### WEIGHT AND BALANCE

These items are included in the basic Rotorcraft empty weight. No further weight and balance calculations are necessary.

BLR-FF212-201F Kit: (Includes Strakes)	Weight: 7.1 lbs Arm: 353.7 in Moment 2511.3
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BLR-FF212-201U Kit: (FastFin Retrofit Only)	Weight: 1.6 lbs Arm: 445.5 Moment: 712.8
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Rev IR



**ROTORCRAFT  
FLIGHT MANUAL SUPPLEMENT**

**Bell Medium Helicopters:**

**Model 212 Series**

**With Increased Takeoff Horsepower  
212-704-153**

**Equipped with**

**BLR Patented FastFin® System**

A/C Reg #: C-GUWX  
A/C Serial #: 30925

This supplement shall be attached to the Model 212 Series Flight Manual when the BLR Patented FastFin® System has been installed.

Information contained herein supplements information of the basic Flight Manual and Flight Manual Supplement, BHT-212-FMS-29. For Limitations, Procedures and Performance Data not contained in this supplement, consult the basic Flight Manual or Flight Manual Supplement, BHT-212-FMS-29.

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Rev IR





### LOG OF APPROVED REVISIONS

Original .....IR 27 Sept 2011

FAA APPROVED:  DATE: 9/27/2011

*for* MANAGER

AIRCRAFT CERTIFICATION OFFICE  
FEDERAL AVIATION ADMINISTRATION  
SEATTLE, WA 98055-4056

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Rev IR

## Section 2

### **NORMAL PROCEDURES**

NOTE ALL ITEMS REMAIN AS IN BASIC RFM EXCEPT THE FOLLOWING:

#### **2-3-B Exterior Check**

- Tailboom Strakes - Inspect for damage, deformation and security of attachment
- Vertical Fin Structure and FastFin Fairings – Inspect for damage, deformation and security of attachment

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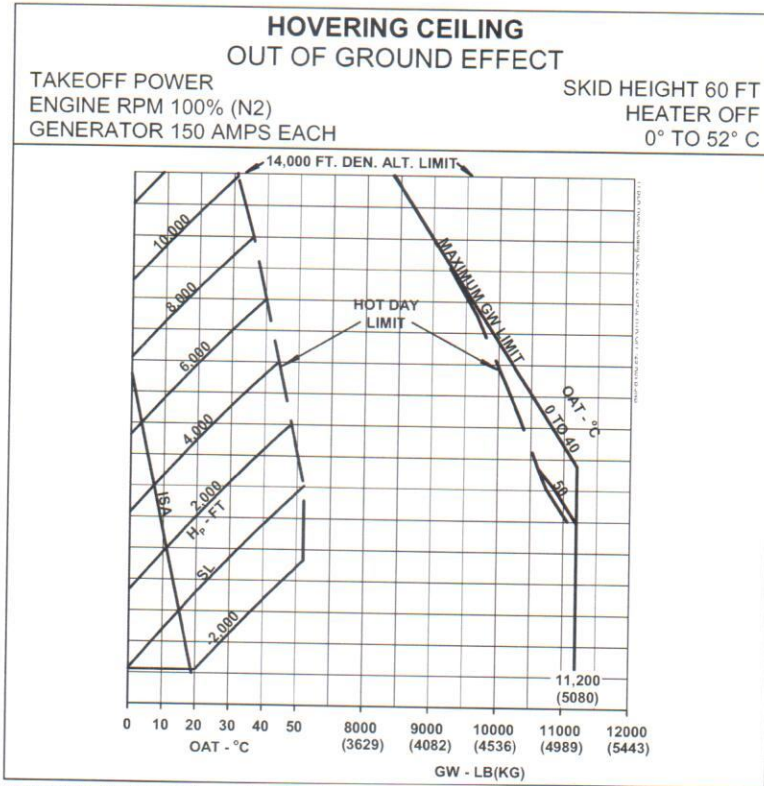
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Rev IR

Page 5 of 10

**Section 4**

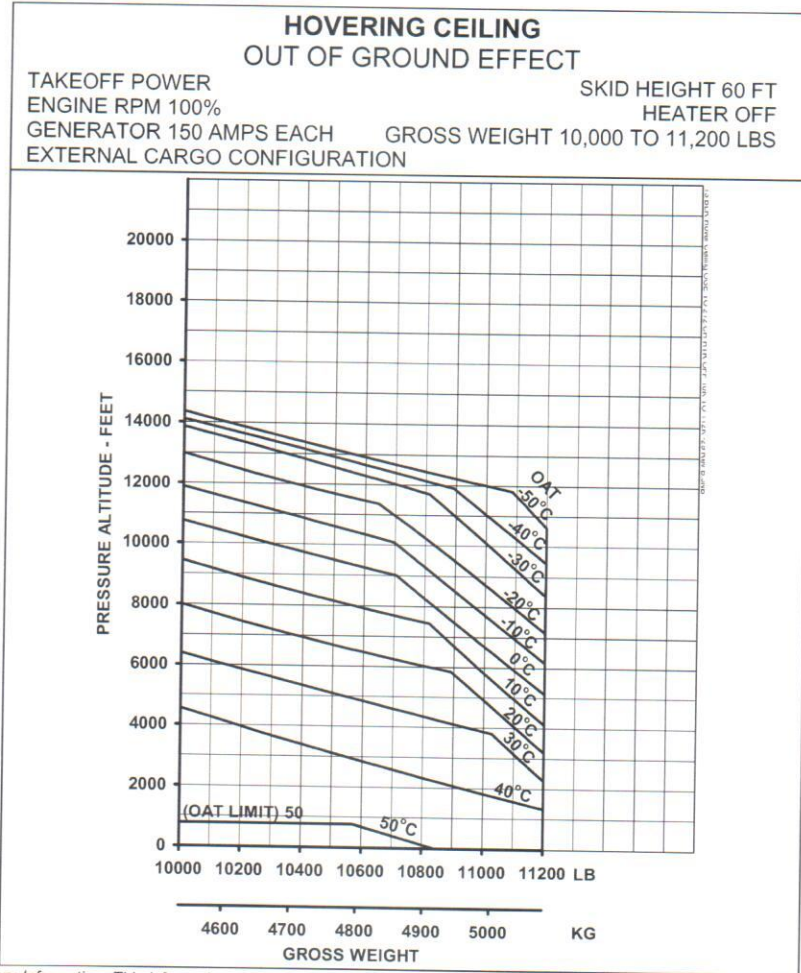
**PERFORMANCE**

NOTE ALL ITEMS REMAIN AS IN BASIC RFM SUPPLEMENT 29 EXCEPT THE FOLLOWING:



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## ROTORCRAFT MANUFACTURER'S DATA

### Section 1

#### SYSTEMS DESCRIPTION

##### 1.5. GENERAL ARRANGEMENT

Fuselage forward section contains nose compartment for electrical and avionics equipment, crew compartment, and passenger/cargo compartment. Center section incorporates transmission compartment and pylon support structure. Aft section houses engines, combining gearbox and oil coolers, and has compartments for avionics, bleed air heater, and optional equipment.

The tailboom is attached to the aft end of fuselage and supports tail rotor, drive train, vertical fin, horizontal stabilizer and elevator.

The FastFin<sup>®</sup> System installation modifies the vertical fin significantly. To improve tail rotor effectiveness, the vertical fin was modified by removing most of the trailing edge. This cutout eliminated most of the trailing edge skin and ribs from the lower end to the tip-cap at the upper end. The FastFin<sup>®</sup> System includes a new tail cone and a removable trailing edge cover, which improves the access to the rear vertical spar for inspection.

Additionally, the Dual Tail Boom Strakes (STC SR00798SE) are required for the FastFin<sup>®</sup> System installation.

### Sections 2 thru 4

No change from basic Manufacturer's Data manual.

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27 Sept 2011

Rev IR

Page 1 of 1