



14218 Aetna St.  
Van Nuys, CA. 91401  
Document Number 407-RFM-001

**FAA APPROVED  
ROTORCRAFT FLIGHT MANUAL  
SUPPLEMENT  
FOR THE  
BELL MODEL  
206 L1, 206 L3, 206 L4, B 407  
WHEN EQUIPPED WITH THE  
TYLER BET-001 CARGO RACK**

REGISTRATION #: \_\_\_\_\_ SERIAL #: \_\_\_\_\_

The information in this supplement is FAA approved material and must be attached to the FAA Approved Bell Rotorcraft Flight Manual when the airplane has been modified by the installation of Tyler Camera Systems BET-001 Cargo Racks in accordance with:

**STC # SR 01826 LA**

The information contained herein supplements or supersedes the information in the basic Rotorcraft Flight Manual only in those areas listed herein. For limitations, Procedures and Performance information not contained in this Supplement, consult the basic Rotorcraft Flight Manual.

FAA APPROVED: Patrick Power

Manager, Flight Test Branch, ANM-160L  
Federal Aviation Administration  
Los Angeles Aircraft Certification Office  
Transport Airplane Directorate

FAA DATE: September 6, 2005



## LOG OF PAGES

Rev No.	Pg No	Date	Description of Change	FAA Approved
NC	1-7	6 Sep 2005	Initial Issue	<i>Patricia Power</i> <hr/> Mgr, Flight Test Branch ANM-160L, FAA, Los Angeles ACO, Transport Airplane Directorate DATE: <u>September 6, 2005</u>



14218 Aetna St.  
 Van Nuys, CA. 91401  
 Document Number 407-RFM-001

Supplement to the Bell RFM for  
 Models B 206 L1, L3, L4  
 B 407  
 when modified with the Cargo Rack System

STC Number SR 01826 LA

## TABLE OF CONTENTS

SECTION	PAGE
<b>1. SECTION 1 – GENERAL.....</b>	<b>2</b>
<b>2. SECTION 2 – LIMITATIONS.....</b>	<b>5</b>
2.1 TYPES OF OPERATIONS .....	5
2.2 AIRSPEED .....	5
2.3 MOUNT LIMITS.....	5
<b>3. SECTION 3 – EMERGENCY PROCEDURES.....</b>	<b>5</b>
<b>4. SECTION 4 – NORMAL PROCEDURES.....</b>	<b>6</b>
<b>5. SECTION 5 - PERFORMANCE.....</b>	<b>6</b>
5.1 HOVER PERFORMANCE .....	6
5.2 CLIMB PERFORMANCE .....	6
<b>6. SECTION 6 – WEIGHT AND BALANCE .....</b>	<b>6</b>

## TABLE OF FIGURES

FIGURE.....	PAGE
FIGURE 1 FRONT VIEW OF INSTALLED RACKS.....	2
FIGURE 2 FRONT VIEW OF INSTALLED RACKS WITH LOAD.....	3
FIGURE 3 FRONT VIEW OF RIGHT RACK WITH LOAD.....	4
FIGURE 4 STATION LOCATIONS FOR THE CARGO RACK.....	7



## 1. SECTION 1 – GENERAL

The Tyler Camera Systems BET-001 Cargo Rack consists of the aluminum tubular frame members and four aluminum-mounting brackets per rack. The mount is attached to the landing gear by four clamps, two per gear and can be easily installed by two people in less than 5 minutes. PIP pins provide additional security to the mount clamp bolts.



**Figure 1 Front View of Installed Racks**



14218 Aetna St.  
Van Nuys, CA. 91401  
Document Number 407-RFM-001

Supplement to the Bell RFM for  
Models B 206 L1, L3, L4  
B 407  
when modified with the Cargo Rack System

STC Number SR 01826 LA



**Figure 2 Front View of Installed Racks with Load**

The aircraft has been demonstrated with a load having a flat plate area of 3.2 square feet per side.



**Figure 3 Front View of Right Rack with Load**

**CAUTION**

Lateral CG can be easily exceeded with heavy weights on the racks.



14218 Aetna St.  
Van Nuys, CA. 91401  
Document Number 407-RFM-001

Supplement to the Bell RFM for  
Models B 206 L1, L3, L4  
B 407  
when modified with the Cargo Rack System

STC Number SR 01826 LA

## 2. SECTION 2 – LIMITATIONS

### 2.1 TYPES OF OPERATIONS

No passengers may be carried external to the aircraft on the cargo racks. Crewmembers or other persons necessary for the conduct of the external load operations may only be carried in accordance with 14 CFR section 133.35.

### 2.2 AIRSPEED

Reduce the published Power – On  $V_{NE}$  20 KIAS with the cargo racks installed and **NO** cargo.

Reduce the published Power – On  $V_{NE}$  70 KIAS with the cargo racks installed and **ANY** cargo attached to the racks.

### 2.3 MOUNT LIMITS

Maximum Weight per Rack: 600 pounds on either side, no more than 300lbs over any single attach point, 1200lbs maximum payload

Maximum flat plate area of 3.2 square feet per side

## 3. SECTION 3 – EMERGENCY PROCEDURES

No change to the basic flight manual



#### **4. SECTION 4 – NORMAL PROCEDURES**

Secure crew members or cargo prior to take-off.

Consider possible loss of any items or material from the right side cargo rack that could impinge on the tail rotor.

#### **5. SECTION 5 - PERFORMANCE**

##### **5.1 HOVER PERFORMANCE**

No Change

##### **5.2 CLIMB PERFORMANCE**

Reduce climb performance by:

20 ft/min with the racks deployed no cargo.

100 ft/min with cargo on the rack.

#### **6. SECTION 6 – WEIGHT AND BALANCE**

The weight and balance data must be considered for each flight.

Distribution of the load on the rack must be considered. Concentrated loads should be placed between the two attach points if possible.



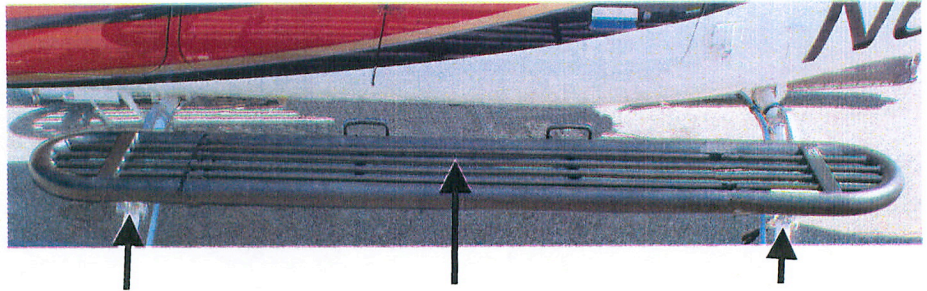


14218 Aetna St.  
Van Nuys, CA. 91401  
Document Number 407-RFM-001

Supplement to the Bell RFM for  
Models B 206 L1, L3, L4  
B 407  
when modified with the Cargo Rack System

STC Number SR 01826 LA

**CAUTION**  
**Lateral CG can be easily exceeded with heavy weights on the racks. Compute the aircraft weight and balance before flight with loads on the racks.**



Fwd Gear 73.0 in Long	Center of Rack 110.0 in Long -42.0 in Left Lat +42.0 in Right Lat Rack Weight 66 lbs	Aft Gear 155.2 in Long
--------------------------	--	---------------------------

**Figure 4 Station Locations for the Cargo Rack**