REV A	PURPO	DSE:							
DOCUMENT NUMBER F	This manual is to provide information, instruction for continued airworthiness, maintenance instructions and rep procedures for HELIFAB'S accessory shelf installation for Bell 212/412/412EP, P/N 2570-01-01. Ensure that this manual is used only for HELIFAB, Inc. equipment.								
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REVISION STATUS AND CONTROL LOG

REV #	DESCREPTION OF CHANGE	DATE ISSUED	DATE INSERTED	BY
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LIST OF EFFECTIVE PAGES

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CHAPTER 1 - INTRODUCTION

1.1 General Product Information

The Accessory Shelf installation installs a shelf assembly in the aft left side avionics compartment of the aircraft that provides a stable platform for the installation of equipment outside the cabin area. <u>MAXIMUM WEIGHT 100Lbs.</u>

The shelf panel is constructed of 6061-T6 aluminum sheet with two structural angles (7075 -T6) attached to the bottom. The assembly is secured to the aircraft using new and existing aluminum angle.

1.2 Scope of ICA

The purpose of these Instructions for Continued Airworthiness (ICA) and Equipment Maintenance Manual (EMM), is to provide necessary information to maintain, inspect, repair, or replace the equipment. Maintenance personnel should be thoroughly familiar with standard abbreviation contained herein, any specific abbreviation or acronym contained can be found in the document text with the full meaning.

1.3 Precautions

The following precautions are used throughout this manual and are defined as follows:

WARNING	IS USED WHEN UNQUALIFIED PERFORMANCE OR NEGLECT OF INSTRUCTIONS MAY LEAD TO INJURIES OR DEADLY ACCIDENTS.
CAUTION	IS USED WHEN UNQUALIFIED PERFORMANCE OR NEGLECT OF INSTRUCTIONS MAY LEAD TO EQUIPMENT DAMAGE
NOTE	IS USED WHEN A PARTICULAR ITEM NEEDS TO BE EMPHASIZED

1.4 Abbreviations

EMM	Equipment Maintenance Manual
ICA	Instructions for Continued Airworthiness
HF	Helifab, Inc.
MIL	US Military Specification
N/C	No Change
TSN	Time since New
FH	Flight Hours
Mo.	Months
Y	Years
N/P	Not Provided

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1.5 Scope of the aircraft maintenance manual.

A The equipment maintenance manual, HF-412-ICA-2570, describes the required procedures for maintaining continued airworthiness for the accessory shelf installation.

This manual only includes information for servicing, maintenance, inspection and repair within the scope of an appropriately rated mechanic or repair station.

- B. Changes to the Equipment Maintenance Manual:
 - (1) Revisions are supplied to all registered owners of aircraft incorporating equipment covered by this manual. It is the responsibility of the owner/ operator that only the current issue of the Equipment Maintenance Manual is used.
 - (2) Changes to the equipment maintenance manuals are to be incorporated.
 - (3) Changes are identified as follows:
 - (a) Revised or extended text, inserted pages with new text contents or new figures are identified with black marginal bars or referenced symbols.
 - (b) When text is relocated, resulting possibly in a renumbering of pages or task, or in case of printing error corrections, no markings are provided.
 - (c) Changed pages are provided with the issue date of the change.
 - (4) Equipment manufacturer's manuals;

Upon initial installation of the Accessory Shelf, HELIFAB, Inc.will provide any installation or operators manuals that are included with the purchase of the new equipment.

1.6 General

- A. Any special tools required are defined in the text.
- B. Torque Values. Unless specified otherwise, the following torques will be used.

Size	Type	Torque
8 - 32	Screw	12-15 in-lbs
10 - 32	Screw	20-25 in-lbs

1.7 Tools

The accessory shelf can be installed using standard aircraft sheetmetal tools

1.8 Consumable Materials ACCESSORY SHELF ICA HF-412-ICA-2570

A. Explanation

Only Consumable materials noted throughout this manual and on referenced drawings are to be used. HELIFAB, Inc.can be contacted to approve alternate or equivalent materials.

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CHAPTER 2 - AIRWORTHINESS LIMITATIONS

2.1 Time Change Items

"No airworthiness limitations associated with this type design change."

CHAPTER 3 – TIME LIMITS/INSPECTIONS

3.1 Overhauls - Time Limits

"There are no overhauls or time limits associated with this type design change."

3.2 Conditional Inspections - Time Limits

Operational Incidents

A. After any operational incident involving hard landings, sudden stoppage of the drive train or water immersion, the system must not be operated unless all requirements, inspections and overhauls are performed in accordance with Chapter 3 of this manual.

3.3 Preflight Check - Equipment

- A. The preflight check shall be accomplished in accordance with this guide by a qualified technician or pilot.
- B Check Installed equipment
 - 1) Check shelf maximum load placard for legibility and security
 - 2) Check shelf for proper security of attachment.

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3.4 12 Months / 100 Hour Inspection

- A. This inspection is to be performed by a qualified technician.
- B. In conjunction with this inspection a complete preflight inspection must be accomplished in accordance with Section 3.3.

DATE: HELICOPTER S/N: TOTAL TIME:

REGISTRY NO:

INS	SPECTION TASK DESCRIPTION	INITIAL MECHANIC
1.	Inspect shelf for proper attachment	
2.	Check shelf maximum load placard for legibility and security	
3.	Inspect shelf assembly and attachment angle condition.	
	Replace any parts that are excessively pitted or corroded, cracked, distorted or	
	broken.	
4.	Return aircraft to service and make appropriate entries in aircraft log book	

CHAPTER 4 – REPAIR

4.1 Troubleshooting

• Loose or improper engagement of installation hardware can be corrected by replacement of defective or worn parts.

4.2 **Repair Procedures**

- No repairs other than those that can be accomplished with normal methods or that are called out in this EMM should be attempted.
- Normal repairs would include paint touch up. Replacement of defective nutplates must be done in accordance with the applicable airframe manufactures instructions and accepted maintenance practices.

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INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND EQUIPMENT MAINTENANCE MANUAL FOR Bell 212/412 ACCESSORY SHELF CHAPTER 5 – WEIGHT AND BALANCE

5.1 Weight and Balance

The new empty weight and corresponding C.G. location must be determined and entered in the aircraft permanent records.

Installation of the Accessory Shelf has the following effect on weight and balance:

WEIGHT	LONGITUDINAL ARM	MOMENT	LATERAL	MOMENT
+ 6.0	193.0	1158.0	- 25	- 150