



#### **OPERATION SAFETY NOTICE**

**412-25-45 412CF-25-16** 27 February 2025

#### TO: All owners and operators of Model 412/412EP and 412CF Helicopters

#### SUBJECT: DART AEROSPACE SERVICE BULLETIN SB20222-02, Revision A.

This Operation Safety Notice (OSN) is to inform Bell helicopter owners and operators of the release of the subject attached Service Bulletin from Dart Aerospace.

For any questions regarding the subject Service Bulletin, please contact Dart Aerospace.

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# **Service Bulletin**

Document Number:	SB2022-02
Date:	2022-DEC-12
Revision:	A
Affected Parts:	Pull Cables with P/Ns listed in Table 1 Section 1.9 of this Service Bulletin that also have a S/N CH022456 to CH108632 or VT255863 to VT255868.
Effective Date:	2023-JAN-01

**NOTE**: This Service Bulletin is sent to the operators of record for the model aircraft as listed in Section 1.9. If an aircraft has been leased or sold, send this service bulletin to the new operator.

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SUBJECT: SERVICE BULLETIN REFERENCE DRAWING: 645.3600/634.0600/634.8300/624.6300/644.3100 649.1700/649.2000/20505/644.7500/649.8900/644.4800

# LOG OF REVISIONS

Rev	Date	Pages	Description	Approval
N/C	2022-DEC-08	All	Initial Release	J. Gardiner
A	2022-DEC-12	1	Revised serial number range for Affected Parts	J. Gardiner
		4	Revised serial number range in Section 1.3	
		6	Revised Section 2.0	



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### SAFETY SUMMARY

#### GENERAL PRECAUTIONS

Personal Protective Equipment (PPE) shall be worn when exposed to flying particles, liquid chemicals, or other potential hazards to the skin, eyes, ears, or respiratory system.

Ensure that the work area is free from dirt and foreign matter and that the valve is protected from environmental hazards and contaminants that could otherwise damage its function.

Failure to comply with or deviate from the procedure may negatively affect the equipment. It is the operator's responsibility to comply with these procedures.

#### DEFINITIONS

The following precaution definitions are used to indicate the seriousness of the hazard or conditions. All of the following may refer to a maintenance procedure, practice, condition, etc.

- WARNING: THIS INDICATES INFORMATION THAT, IF NOT FOLLOWED, COULD RESULT IN PERSONAL INJURY, DEATH, OR LONG-TERM HEALTH CONDITIONS.
- **CAUTION**: THIS INDICATES INFORMATION THAT, IF NOT FOLLOWED, MAY RESULT IN DAMAGE TO OR DESTRUCTION OF EQUIPMENT, OR THE LOSS OF MISSION EFFECTIVENESS.
- **NOTE**: This indicates information that aids in understanding or provides additional detail on the methods of a procedure.



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### 1.0 INTRODUCTION

#### 1.1 SUBJECT

Pull cables that were manufactured between November 01, 2021 and July 25, 2022 must be replaced.

#### 1.2 BACKGROUND

It has come to Dart's attention that a number of pull cables may have been manufactured using an incorrect crimping tool as part of a process improvement initiative. When installed, the pull cables are connected to a handle which is used to activate either the float or liferaft system during an emergency water landing. The problem was recently identified by two customers who had the pull cables fail (the ferrule on the end of the cable separated from the cable) while they were using the Dart Pull Cable Test Tool to validate the installation of the pull cables as part of a float/liferaft system.

#### 1.3 ACTION

Pull Cables with the P/Ns listed in Table 1 of this SB that also have a S/N CH022456 to CH108632 or VT255863 to VT255868. must be replaced in accordance with the Instructions for Continued Airworthiness that is applicable to each STC listed in Section 1.9. The latest version of the Instructions for Continued Airworthiness can be found on the Dart website at www.dartaerospace.com.

**NOTE:** If INOPPING the system is desired to prevent an unsafe condition, proceed to Appendix A.

#### 1.4 COMPLIANCE

This SB is MANDATORY. End user must comply with this SB within three months from the effective date listed on the cover sheet of this SB.

#### 1.5 MANPOWER

Maintenance-Man-Hours are based on hands-on time and can change per facility and availability of qualified personnel. DART estimates that compliance with this SB will require approximately 8 hours.

#### 1.6 WEIGHT AND BALANCE

Incorporating this SB has no effect on the A/C weight and balance.

#### 1.7 PUBLICATIONS AFFECTED

No publications will be affected.



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#### 1.8 APPROVAL

The modifications described in Section 1.3 have been shown to comply with applicable Federal Aviation Regulations.

#### 1.9 AFFECTED MODELS

Table 1					
AIRCRAFT	PULL CABLE P/N	FAA STC			
AS350/AS355	645.3601, 645.3603, 645.3604	SR00831LA			
412EP/412CF/412	634.0603, 634.0604, 634.0605, 634.0607	SR01459LA			
412/412CF/412EP/AB412/A B412EP	634.0601, 634.0602, 634.0603, 634.0604, 634.0605, 634.0607, 634.0609	SR01779LA			
EC120	634.8301, 634.8302, 634.8304	SR00780LA			
EC130	624.6303, 624.6304, 624.6305, 624.6306, 624.6308, 624.6309, 624.6310	SR01687LA			
EC135P1/EC135P2/EC135P 2+/EC135P3/EC135T1/EC1 35T2/EC135T2+/EC135T3	644.3101, 644.3102, 644.3103, 644.3106, 644.3108, 644.3109, 644.3110	SR01855LA			
EC145	649.1701, 649.2003	SR02517SE			
MD369FF/MD369F/MD369E /MD369D/MD369HE/MD369 HM/MD369HS/MD500N/MD 500	20505-1	SR00932LA			
R44II/R44	644.7501, 644.7502, 644.7503	SR02049LA			
R66	649.8901	SR02484LA			
S-76C/S-76B/S-76A	644.4801, 644.4802, 644.4803, 644.4804	SR01902LA			



### 2.0 GENERAL

1. Record compliance to this Service Bulletin in the aircraft logbook.

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Rev. A



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# APPENDIX A

- 1. For systems with quick-release pins in the handles follow steps 2-4. For systems without a quick-release pin follow step 5.
- 2. INOP the Emergency Float System by replacing the "Remove Prior to Flight" warning tag with the P/N 604.5213 "Emergency Float System Inoperative" Warning Tag on the P/N 601.0998 quick-release pin.
- 3. Insert the modified quick-release pin into the float or liferaft activation handle.
- 4. Ty-wrap the pin into place on the handle so that the Warning Tag is clearly visible but does not interfere with flight operations.
- 5. Secure the P/N 604.5213 to the handle using a ty-wrap so that the Warning Tag is clearly visible but does not interfere with flight operations.

The P/N 604.5213 "Emergency Float System Inoperative" Warning Tags can be obtained from DART. Contact DART Customer Service for a resolution on the issue.