



# SERVICE BULLETIN

DATE: 18 SEPTEMBER 2000

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**MANDATORY**

\* Supersedes Service Bulletin SB600N-016 dated 30 September 1998. Revision 1 adds an alternate part number for the Voice Warning LRU. Aircraft which have complied with SB600N-016 meet the intent of this revision.

## AUDIO WARNING SYSTEM MODIFICATION

### 1. PLANNING INFORMATION

#### A. Aircraft Affected:

**Part 1** - All MD600N helicopters, serial number RN003 thru RN049 certified in the United Kingdom. Owner/Operators of helicopters not certified in the United Kingdom, may perform this Bulletin as an option.

**Part 2** - Optional for all MD600N helicopters serial number RN003 thru RN0049. **Part 1** must be complied with if performing **Part 2**.

#### B. Assembly/Components Affected By This Notice:

**Part 1** - Voice Warning LRU P/N 600N4514-3 or 600N4514-5.

**Part 2** - Fuselage Wire Harness, and Console Wire Harness.

#### C. Reason:

**Part 1** - Replacement of the Voice Warning LRU P/N 600N4514-3 with P/N 600N4514-5 or P/N 600N4515-1 provides increased voice warning volume output and a second voice warning audio output channel. This allows the Voice Warning to interrupt the the ICS System and enunciate warning messages when necessary. Failure to comply with Part 1 may result in insufficient voice warning volume during high noise operations e.g. doors off.

**Part 2** - Modification for routing the Intercommunications System (ICS) output through the Voice Warning LRU. This incorporates the second voice warning audio output channel provided by the 600N4514-5 or 600N4515-1 Voice Warning LRU. Failure to comply with part 2 may result in ICS communications partially obscuring the voice warning enunciations with certain stereo systems.

#### D. Description:

**Part 1** - Procedures in Part 1 provide owners and operators with information pertaining to the replacement of the Voice Warning LRU.

**Part 2** - Procedures in Part 2 provide owners and operators with information pertaining to the modification of the interconnecting wire harness.

#### E. Time of Compliance:

**Part 1** - The requirements of Part 1 shall be accomplished at the next major inspection, or as parts become available, or prior to registering the helicopter in the United Kingdom, whichever occurs first.

**Part 2** - Optional.

#### F. FAA Approval:

The technical design aspects of this Bulletin are FAA Approved.

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## G. Manpower:

**Part 1** - One half (0.5) Man-hour.

**Part 1 and Part 2** - Four (4) man-hours.

## H. Interchangeability:

The 600N4514-3 Voice Warning LRU is replaced by the 600N4514-5 or 600N4515-1 Voice Warning LRU.

## I. Points of Contact:

For further assistance, contact your local MDHI Field Service Representative (refer to the latest revision of the "At Your Service" handbook for address and telephone numbers) or contact the Field Service Department at MDHI, Mesa, Arizona. Telephone 1-800-388-3378 or (480) 346-6387. DATAFAX: (480) 346-6813.

## J. Material/Part Availability:

Contact MDHS Warranty and Repair Dept.

REPLACEMENT PARTS/SUPPLIES			
Nomenclature	Part No.	Qty.	Source
Voice Warning LRU (1) (2)	600N4514-5 or 600N4515-1	1	MDHI or Commercial
Wire, Normal Weight, Tin Coated Copper (2)	M22759/34-22-9 (RM015660)	150 in (381 cm)	MDHI or Commercial
Contact, Pin (2)	M39029/58-360	2	MDHI or Commercial
Contact, Socket (2)	M39029/32-259	2	MDHI or Commercial
Contact, Socket (2)	M39029/22-191	1	MDHI or Commercial
Contact, Socket (2)	M39029/56-348	1	MDHI or Commercial

### NOTE:

- (1) Required for part 1.
- (2) Required for part 2.

## K. Warranty Policy:

The standard warranty policy applies.

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### L. Tooling:

Tools listed in this table may be purchased from the sources in the table notes or provided on loan from Boeing. Contact your Field Service Representative to arrange for loaner tool. (Ref. 1. I. **Points of Contact**).

REQUIRED TOOLS FOR ELECTRICAL TERMINATIONS					
Item No.	Availability (Ref. Note:)	Tool Frame Part No.	Turret Part No.	Positioner Part No.	Insertion/Extraction Part No.
1	(1) (3) (1) (1) (2) (3) (1) (2) (3)	M22520/1-01	M22520/1-02	N/A	DAK/DRK 20 or M81868/17-09 Insert M81969/19-07 Extract
2	(1) (1) (2) (3)	M22520/2-01	K330-3	86-19	MS3160-20 or 81515-23
	(1) (3)	M22520/7-01	M22520/7-11	N/A	
3	(1) (3) (1) (1) (2) (3)	M22520/2-01	M22520/2-09	N/A	DAK/DRK 95-22M or M81469/14-01
4	(1) (3) (1) (1) (2) (3)	M22520/2-01	M22520/2-07	N/A	DAK/DRK 95-22M or M81469/14-01

### NOTE:

- (1) Daniel's Manufacturing, phone number (407) 855-6161.
- (2) Richie Electrical, phone number (800) 966-1161 and (602) 831-1318.
- (3) MDHI Warranty and Repair Dept.

### M. Weight and Balance:

N/A

### N. Electrical Load Data:

N/A

### O. Disposition of Parts Removed:

Return to MDHI.

### P. Other Publications Affected:

Illustrated Parts Catalog (CSP-IPC-4)

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## 2. ACCOMPLISHMENT INSTRUCTIONS

### A. Part 1:

(Ref. Figure 1)

- (1). Disconnect P19 from voice warning control unit. Bag or cap P19 to prevent FOD.
- (2). Remove four (4) bolts and washers attaching existing voice warning LRU. Retain hardware for reinstallation of new voice warning LRU.
- (3). Install 600N4514-5 or 600N4515-1 voice warning LRU using four (4) bolts and washers. Torque bolts per the Handbook of Maintenance Instructions (CSP-HMI-2, Section 20-00-00).

### B. Part 2:

(Ref. Figure 2)

- (1). Perform Part 1.
- (2). Fabricate wires in accordance with Wire Build Table.

WIRE BUILD TABLE						
Wire No.	Wire Nomenclature	Part No.	Wire Length	Termination		Source
				A	B	
1	W1087B22	M22759/34-22-9	72 in (183 cm)	M39029/22-191 (2)	M39029/56-348 (4)	MDHI
2	W1087A22	M22759/34-22-9	36 in (92 cm)	M39029/58-360 (3)	M39029/32-259 (1)	MDHI
3 (1)	W1086C22	M22759/34-22-9	36 in (92 cm)	M39029/58-360 (3)	M39029/32-259 (1)	MDHI

#### NOTE:

- (1) This wire may exist in some aircraft, if installed do not replace.
- (2) Number after termination part number, refers to tools required by item number in required tools table (Ref. **1. L. Tooling**).
- (3). Modify fuselage wiring harness as follows:

**NOTE:** Route and secure added wires with existing wire harness. Trim any excess wire length and reterminate as necessary.

- (a). Visually verify if wire W1086C22 is installed from J1201-40 to P19-G. If not installed, install new wire.
- (b). Install wire W1087A22 from J1201-42 to P19-J.
- (4). Modify console wiring harness as follows:

**NOTE:** Route and secure added wires with existing wire harness.

- (a). Relocate W1085B22 from TB502-6F to TB502-6S.

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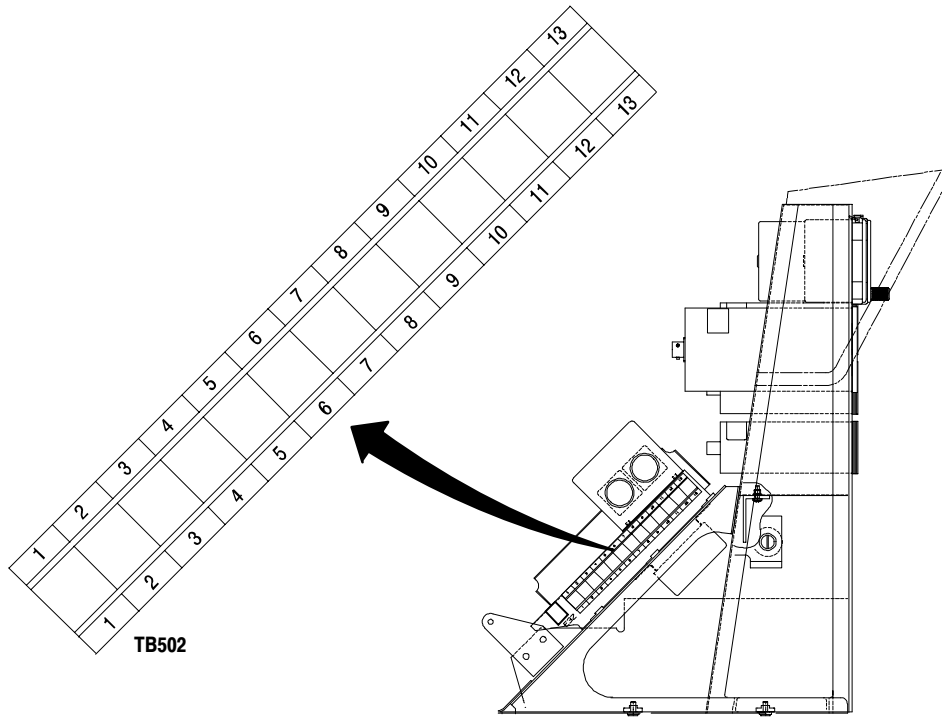
- (b). Install W1087B22 from P1201 to TB502-6H.
- (5). Reconnect P19 to voice warning control unit.
- (6). Secure any opened areas.
- (7). Record compliance to this Service Bulletin in the Compliance Record section of the helicopter Log Book.

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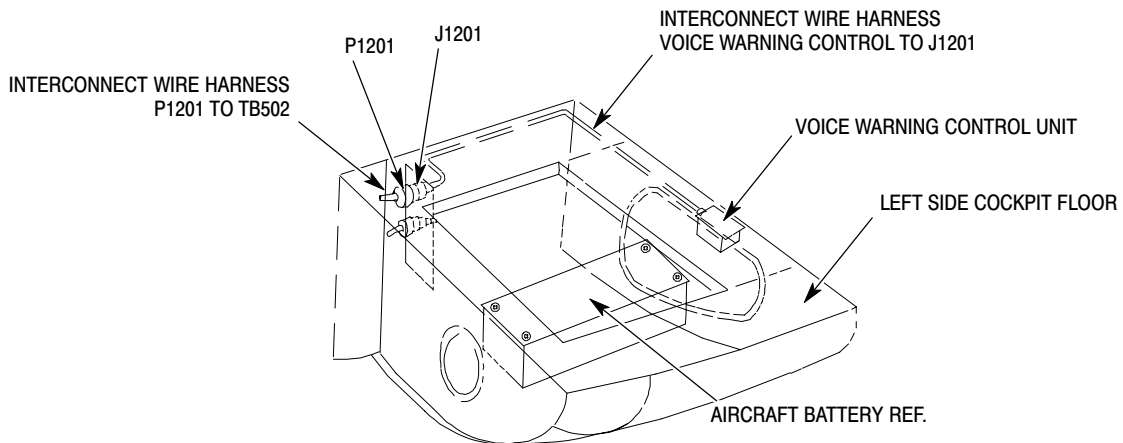
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INSTRUMENT CONSOLE, LOOKING INBOARD LEFT SIDE



**Figure 1. Component Locations**

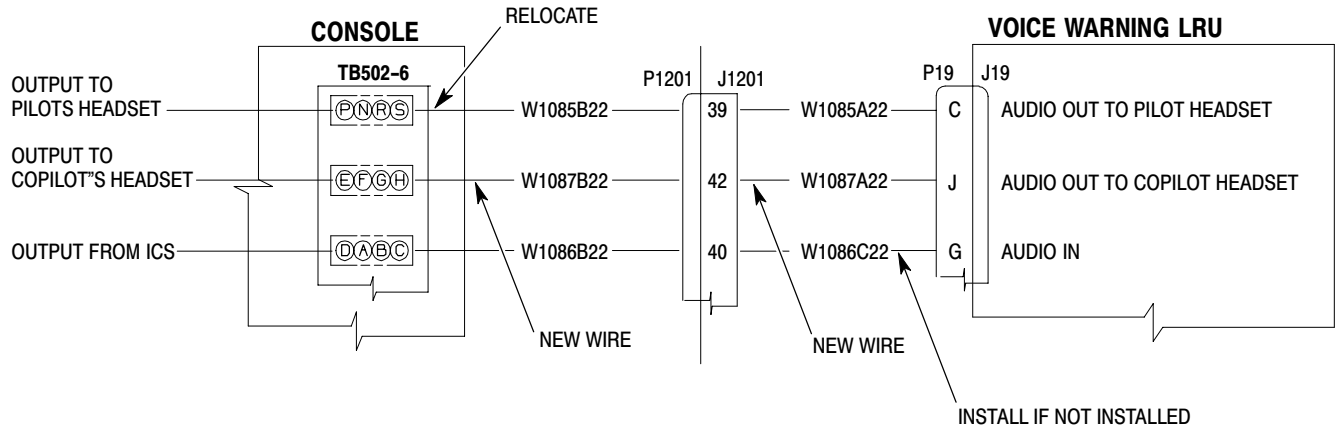
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**Figure 2. Wiring Modification**

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