



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**US ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND**  
**AVIATION AND MISSILE RESEARCH, DEVELOPMENT, AND ENGINEERING CENTER**  
5400 FOWLER RD  
REDSTONE ARSENAL, AL 35898-5000

AMSRD-AMR-AE-B

10 Oct 07

MEMORANDUM FOR PEO Aviation, Systems Engineering, (SFAE-AV-S/Mr. Rusty Graves),  
Redstone Arsenal, AL 35898-5000

SUBJECT: Authorization to use Software Version Windows 1.0, for Avion Manufacturing, Inc.  
Universal Static Balance Fixture, (TN 46831).

1. Reference memorandum, AMSRD-AMR-AE-B, 24 Jul 07, SUBJECT: US Army Research and Development Command (USA RDECOM) Aviation Engineering Directorate (AED) Authorization to use Version 12.00 Software, for Avion Manufacturing, Inc. Universal Static Balance Fixture, (TN 42363)
2. Avion Manufacturing, Inc designed, built and tested the Universal Static Balance Fixture (USBF) to perform static balancing of main rotor blades for OH-58A/C/D,UH-1H, CH-47D/F, MH-47E/G, AH-1S, AH-64 and H-60 series helicopters. The USBF provides an easy-to-use tool that accurately measures the blade’s span and chord moments and generates recommended weight adjustments to return the blades to the original manufacturer’s production specification.
3. The USBF, with software Version Windows 1.0, is capable of enhancing the U.S. Army’s main rotor blade static balancing and is authorized for use at all levels of maintenance. This memorandum is not an authorization to procure any material or services as “Sole Source”. Procurement of the USBF and any spare parts must be accomplished through “Local Purchase” at this time. The sole purpose of this memorandum is to authorize the use of the USBF.
4. The affected end items are as follows:

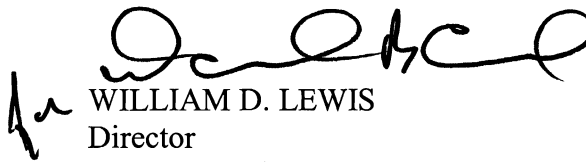
<u>AIRCRAFT</u>	<u>BLADE PART NUMBER</u>	<u>BLADE NATIONAL STOCK NUMBER</u>
AH-1F	K747-003-403	1615-01-289-2694
AH-64	7-31141200 (note 1)	1615-01-147-4873
	7-311412000-3 (note 1)	1615-01-310-4978
	7-311412000-5 (note 1)	1615-01-332-0702
CH-47D/F	114R1702-37 (note 1)	1615-01-145-7109
	11441702-38 (note 1)	1615-01-145-7110
MH-47E/G	114R1702-37 (note 1)	1615-01-145-7109
	114R1702-38 (note 1)	1615-01-145-7110

SUBJECT: Authorization to use Software Version Windows 1.0, for Avion Manufacturing, Inc. Universal Static Balance Fixture, (TN 46831).

H-60	70150-09101-041 <sup>(note 1)</sup> 70150-09101-043 <sup>(note 1)</sup>	1615-01-074-5150 1615-01-106-1903
OH-58D	406-015-101-113	1615-01-239-7004
OH-58A	206-011-250-113	1615-01-137-8137
OH-58C	206-011-250-119	1615-01-544-7181
UH-1H	204-011-250-113	1615-01-092-1256

Note 1: If erosion protection is installed, this part number requires that the USBF be equipped with, and the blade be balanced with, the appropriate erosion protection blade software option.

5. All levels of maintenance may static balance the main rotor blades listed in paragraph 4. Balancing must be performed in accordance with procedures contained in the Avion Manufacturing Inc. Universal Static Balance Fixture Operator's Manual, Version Windows 1.0 dated Aug 2007. The operator's manual is written for the Avion Manufacturing, Inc. No additional tools to the AVUM shop set are necessary to static balance rotor blades.
6. A copy of this memorandum for record shall be inserted into the Avion Manufacturing, Inc USBF operator's manual as authority to utilize the fixture for the blades listed in paragraph 4.
7. This memorandum augments the referenced memorandum dated 24 Jul 07.
8. The points of contact for this action are Mr. Brad Mason, AMSRD-AMR-AE-BG, at (256) 313-2376, DSN 897-2376, e-mail: brad.mason@us.army.mil or alternate Mr. Pat Atkins, (Support Contractor, Camber Corporation), (256) 313-8957, E-mail: patrick.atkins@us.army.mil.

  
WILLIAM D. LEWIS  
Director  
Aviation Engineering

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