

STAFF SUMMARY SHEET

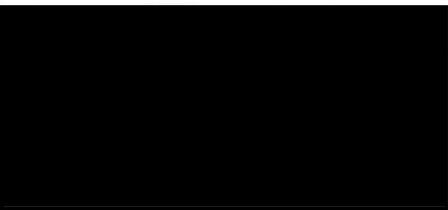
	TO	ACTION	SIGNATURE (<i>Surname</i>), GRADE AND DATE		TO	ACTION	SIGNATURE (<i>Surname</i>), GRADE AND DATE
1	AMC/ SGXL	Info		6			
2	AMC/ A3RP	Info		7			
3	AMC/ A5QH	Info		8			
4				9			
5				10			

SURNAME OF ACTION OFFICER AND GRADE 	SYMBOL ASC/WLNNA	PHONE 	TYPIST'S INITIALS 	SUSPENSE DATE
---	---------------------	-----------	-----------------------	---------------

SUBJECT Safe-to-Fly (STF) Recommendation for the Impact Instrumentation, INC. 731 Series Model EMV+ Ventilator	DATE 20111004
---	------------------

SUMMARY

1. **PURPOSE.** Provide Air Mobility Command (AMC) with a C-130J STF recommendation for the Impact Instrumentation, INC. 731 Series Model EMV+ Ventilator (Impact 731).
2. **BACKGROUND.** The Impact 731 weighs only 10 pounds 10 ounces (including the AC power supply). The Impact 731 went through electromagnetic interference, explosive atmosphere, and acceleration testing to support a safety of flight decision.
3. **DISCUSSION.** The Impact 731 passed all testing. C-130J engineering (ASC/WLNNA) has reviewed the Impact 731 system and has no safety of flight concerns. The Impact 731 is suitable for use on the C-130J aircraft with the following stipulations:
 - a. The Impact 731 will be stored in the medic's equipment bag when not in use, and tied down when in use. Tie down will be either by attaching to the special medical emergency evacuation device, or by tie down between the patient's legs on the litter as shown on page 12 of Technical Report FY11.007 (Tab 1).
 - b. Since the alarm bar and SpO2 sensor are not Night Vision Goggle (NVG) compatible, the care provider must use the SpO2 sensor cover to make the sensor NVG-friendly and place tape over the alarm bar as necessary to reduce interference to NVG operators.
4. **VIEW OF OTHERS.** The Impact 731 has been released as STF on the C-130E/H aircraft.
5. **RECOMMENDATION.** Tactical Airlift Division recommends releasing the Impact 731 as STF on the C-130J fleet with the stipulations mentioned in paragraph 3 above.



1 Tab
Technical Report FY11.007, page 12

battery life time was 11 hours and 47 minutes. The EUT internal battery's recharge time was on average 2 hours and 27 minutes. Both these values meet the manufacturer's ratings.

The battery life tests were performed in climatic conditions (60°C and -20°C). The EUT's battery life met the criteria at 60°C. However at -20°C, it was 3 hours short of meeting the specification of 10 hours of battery life. The battery recharge time was evaluated at 0°C and 45°C. At 0°C, the recharge time was 3 hours, meeting the manufacturer's specification. However, at 45°C, the recharge took 5 hours and 25 minutes.

Despite the minor shortcomings, the EUT still met the criteria stated in Table 2. More details can be seen in Appendix B.

2.1.2.4 Aircraft Tie-Down Configuration:

The ATL determined a tie-down configuration for the EUT. This device is designed to attach to the SMEED , but it can also be tied down between the patient's legs on a litter. The tie-down configurations are shown below in Figure 2 and Figure 3.



Figure 2: SMEED Tie-down Configuration



Figure 3: Litter Tie-down Configuration