
Description

(Revision 2, May 2005)

The ACES Systems' Model 2020 ProBalancer Analyzer series is manufactured with a standard software package installed, which facilitates the storage and retrieval of vibration data. This data is necessary for balancing of helicopter main and tail rotors while utilizing polar balance charts. Put simply, the unit collects vibration data then displays it in the format of "x.xx" IPS at "xx: xx:xx" clock angle. The user then takes this information and manually plots it on the appropriate polar balance chart to determine the corrections needed for smoother operation of the rotor(s).

By upgrading the Model 2020 ProBalancer Analyzer series to ACES Systems' Enhanced Performance Software (EPS) the user can automate the task of rotor balancing. After the upgrade, you program a setup into the analyzer using the published influence information from one or more polar balance charts. The upgraded analyzer then shows the *actual adjustments* needed rather than just raw vibration data as is given without the enhancement. When upgraded to the EPS, the basic operation of the Model 2020 series will be as described in the User Manual, publication number 2020-OM-01.

It is important to note that a thorough knowledge of both the polar balance charts and the helicopter rotor balancing process is required to properly utilize EPS. That knowledge enables you to construct the electronic charts. The adjustment information presented by the analyzer is only as good as the accuracy of the electronic chart you enter.

This supplement is divided into four separate sections:

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| <i>Section 1</i> | Provide a basic polar chart introduction and the information needed to program a setup |
| <i>Section 2</i> | Familiarize the user with the processes and screens associated with main and tail rotor setups |
| <i>Section 3</i> | Give step-by-step instructions from start to finish of the enhanced analyzer's rotor job process. |
| <i>Section 4</i> | Give step-by-step instructions on how to manage the data collected including the analyzer's review and print functions. |