Sample of a Request for Loan Letter:

*14 Feb 2023*

From: Mr. xxx xxxxxxx

Ames Supersonics Project

To: Maureen Delgado

Chief, Wind Tunnel Division

MS 227-5

NASA Ames Research Center Moffett Field, CA 94035

Subject: Request for Loan of NASA Ames 1.00 inch MK14C Strain-gauge Balance

1.Request

The NASA Supersonics Project requests the loan of the NASA AMES 1.00 inch MK14C 6-component internal strain-gauge balance, its related check loading hardware, and a dummy balance for the Boeing Sonic Boom Test in the GRC 8x6 Wind Tunnel. The loan period shall be from 5 July 2012 through 17 September 2012. This balance will be used as the Primary Test Balance.

2.Financial Liability

The NASA Supersonics Project accepts responsibility for repairing or replacing the balance and associated equipment should damage occur while in our possession (this includes all mechanical and electrical aspects of the balance including the taper and outer sleeve). The Supersonics Project understands the replacement cost of a balance is approximately $250K and refurbishment costs vary widely depending on the damage (e.g. cable repairs/replacements can be $2K or greater, flexure replacements can be $20K or more, and full recalibrations of balance after repairs are made can be in the order of $25k).

3. Items Requested

Balance -The balance to be loaned shall be the Ames 1.00" diameter MK14C 6- component internal strain-gauge balance equipped with a 29-foot, permanently attached cable terminated in taper pins. Each balance bridge is wired with four wires (a pair for excitation and a pair for signal) - there are no independent sense lines. Also, all four thermocouples are not working. The balance was last calibrated at Triumph in March 2008. The calibration assumes the excitation sense is made at the taper pins.

Check Load Hardware - The check load hardware associated with the 1.00" MK14C balance will also be part of the loan. This will consist of a 1.00" calibration body, roll arms, related fasteners, and a balance-to-calibration-body roll pin.

Dummy Balance - The loaned hardware will also include one #6672 dummy balance.

4. Static and Dynamic Loading Limits

The balance loads will be monitored so as not to violate a theoretical-infinite-life criterion for the balance by limiting the static and dynamic loads to values determined by the Ames-provided Modified Goodman diagram for the 1.00" MKI4C balance.

5. Objective Evidence of the State of the Balance

Ames shall supply "as shipped" mechanical and electrical inspection report sheet with the balance. The Supersonics Project shall supply to NASA Ames similar "as shipped" mechanical and electrical inspection report sheet upon the return of the balance.

The balance and associated equipment is to be shipped to:

ATTN:

Telephone:

Address:

The NASA Supersonics Project point of contact is:

Name

Title

Telephone

Requester

Mr.xxx xxxxxxx

Ames Supersonics Project

Signature

Approval

Maureen Delgado

Chief, Wind Tunnel Division

Signature