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SQT

(NASA-CR-161497) ADDENDUM TO SSV GENERIC OBT FIRST STAGE
ASCENT BASE CONVECTIVE HEATING ENVIROMENTS (Remtech, Inc.
Huntsville, Ala.) 5 p

N80-27631

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ADDENDUM
TO
SSV GENERIC OBT
FIRST STAGE ASCENT BASE
CONVECTIVE HEATING ENVIRONMENTS



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20 December 1978

Prepared Under
Contract NAS8-29270



For
National Aeronautics and Space Administration
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SUMMARY

SSV base convective heating environments during the recirculated flow time segment of first stage ascent were determined for the generic OFT trajectory and reported in Reference 1. Three regions of interest in the Orbiter base region were overlooked in that original presentation. Convective environments to these locations for OFT Mission C have been determined and are presented in the attachments.

Figure 1 - First stage convective heating to the internal surfaces of the OMS Nozzle

Figure 2 - First stage convective heating to the aft facing #8 and #9 RCS Nozzles

Figure 3 - First stage convective heating to the base (trailing edge) of the Vertical Tail

Base gas recovery temperature for the Mission C trajectory, presented in Figure 1 of Reference 1, is applicable to Figures 1 through 3 of this report.

Reference 1 REMTECH Report RTR 014-6, "SSV Generic OFT First Stage Ascent Base Convective Heating Environments," R. L. Bender, Jr., and Young C. Lee, October 31, 1978.

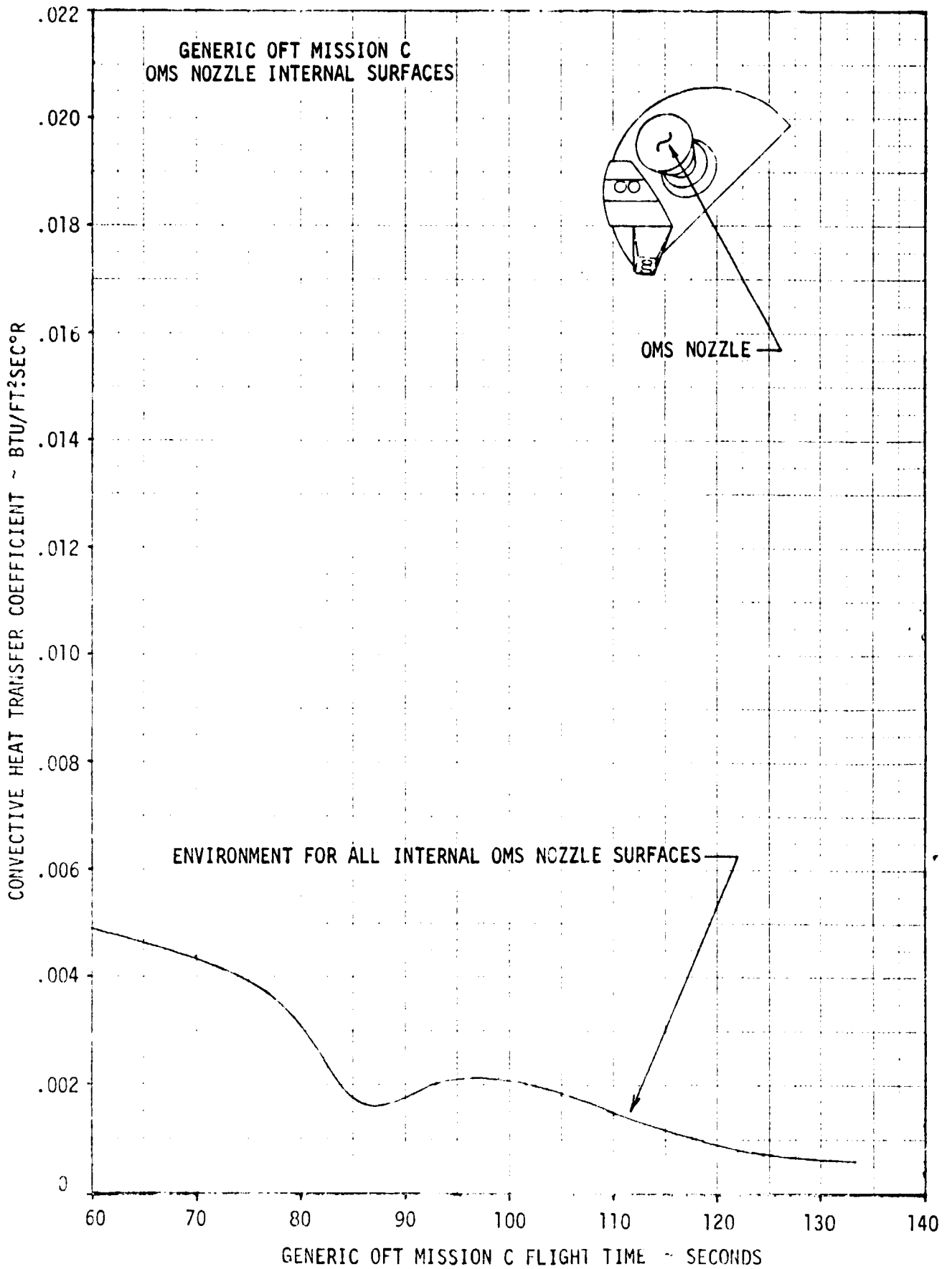


FIGURE 1. FIRST STAGE CONVECTIVE HEATING TO THE INTERNAL SURFACES OF THE OMS NOZZLE

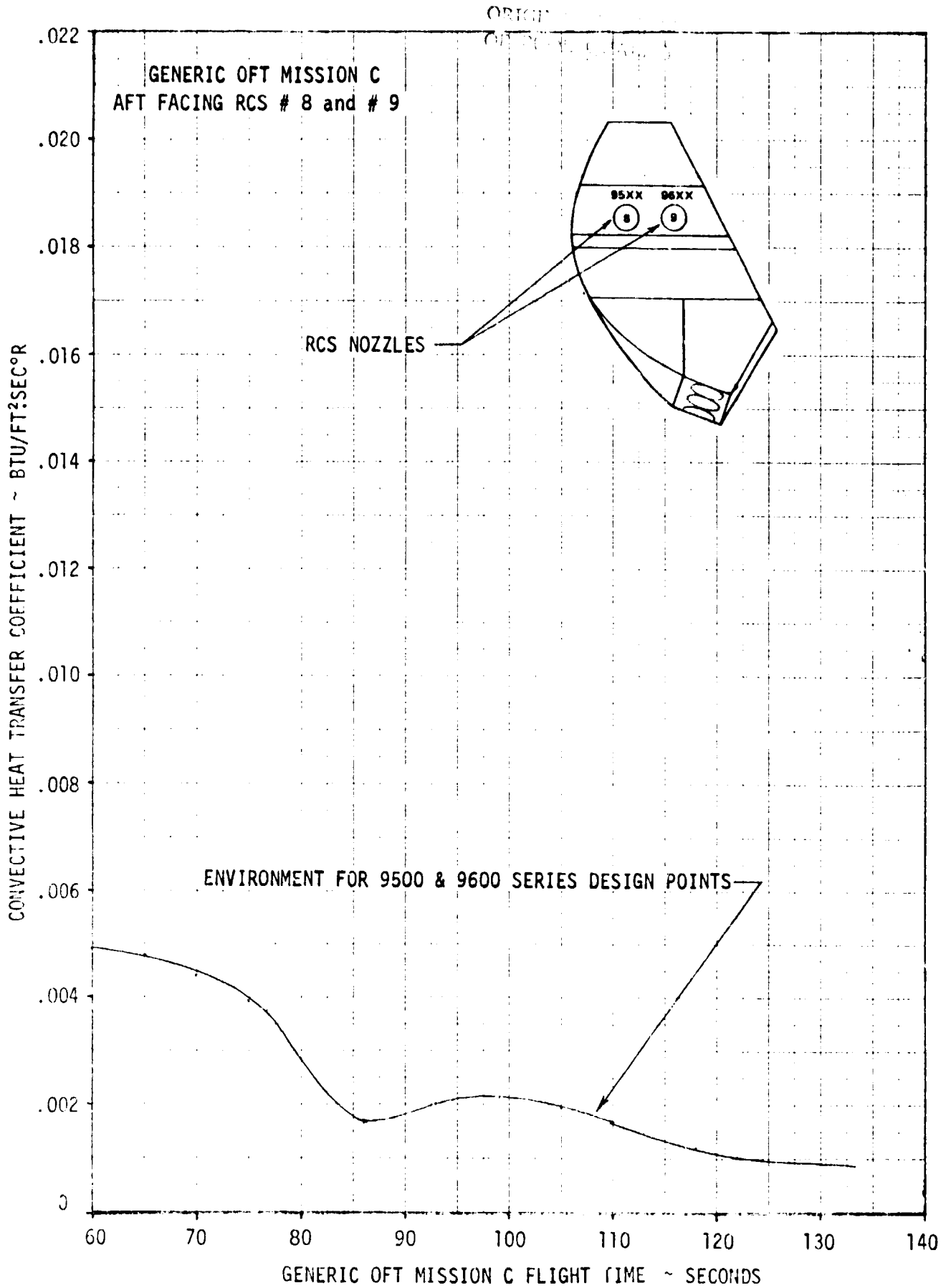


FIGURE 2. FIRST STAGE CONVECTIVE HEATING TO THE AFT FACING #8 AND #9 RCS NOZZLES

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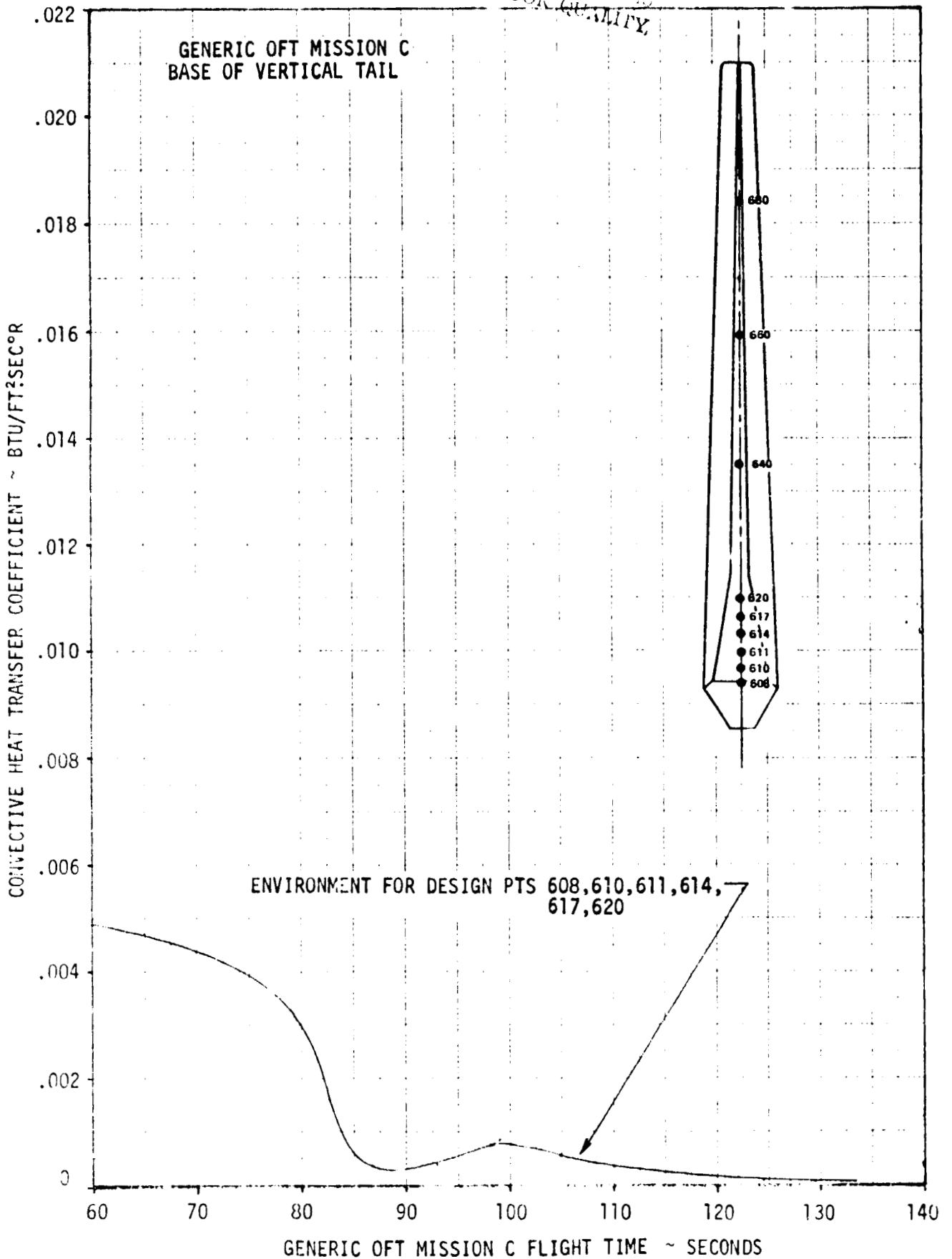


FIGURE 3. FIRST STAGE CONVECTIVE HEATING TO THE BASE (TRAILING EDGE) OF THE VERTICAL TAIL