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BROOKHAVEN NATIONAL LABORATORY SELECTED CRYOGENIC DATA NOTEBOOK

VOLUME II
SECTIONS X-XVIII

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ABBREVIATIONS AND TERMS

UTS	ultimate tensile strength
PSI	pounds per square inch
KSI	1000 pounds per square inch
°F	degrees Fahrenheit
HR	hour, hours
MIN	minute, minutes
IN.	inch, inches
MM	millimeter, millimeters
DIA	diameter
FT-LB	foot-pounds
BTU	British Thermal Units
WQ	water quench
OQ	oil quench
AC	air cool
FC	furnace cool
R	stress ratio (minimum stress/maximum stress in fatigue tests)
K_t	theoretical stress concentration factor, according to Peterson's data
LONG.	longitudinal grain direction
TRANS	transverse grain direction
DPH	Diamond Pyramidal Hardness
NOL	Naval Ordnance Laboratory

**

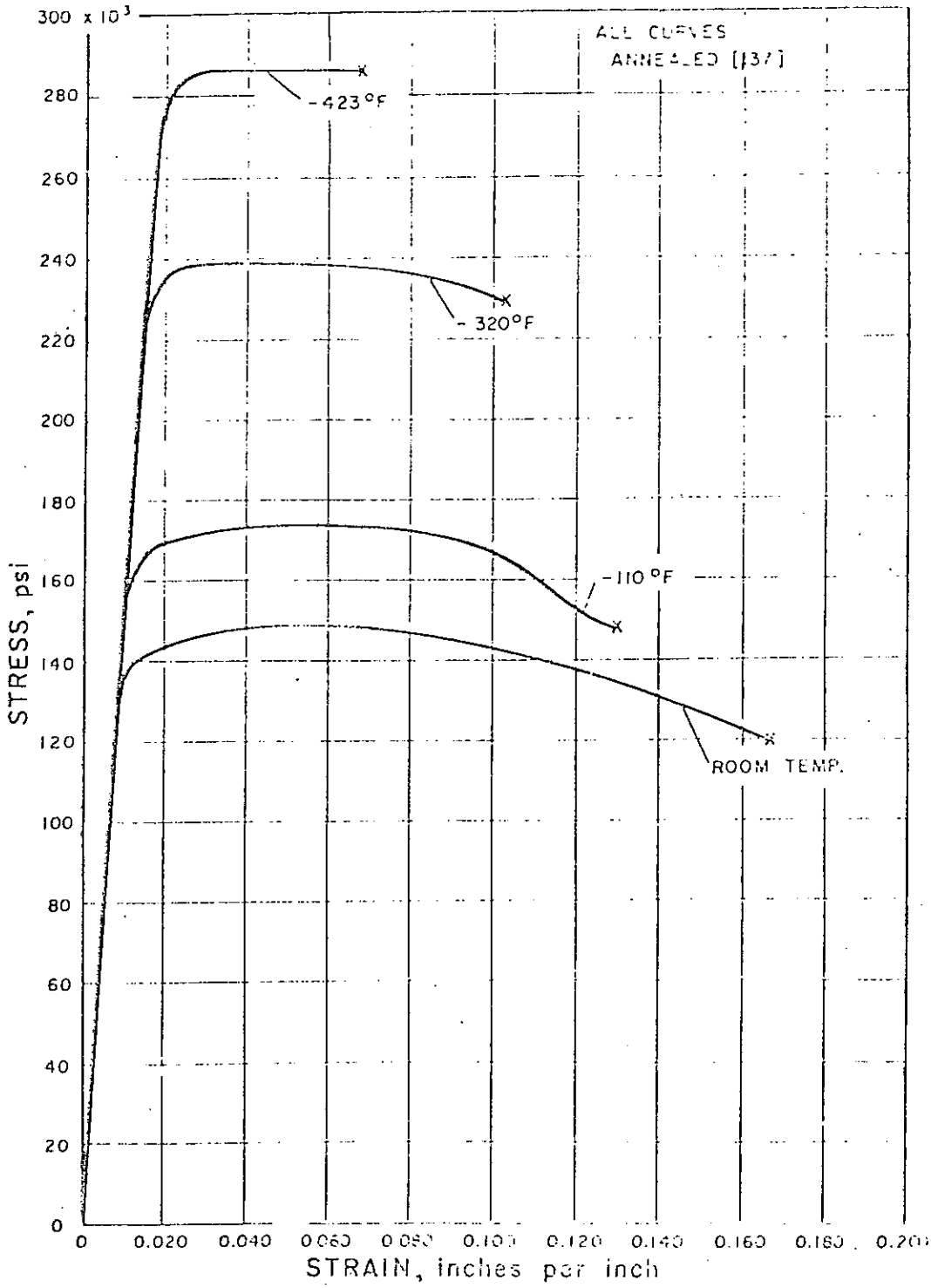
All of the mechanical properties data in this section are presented graphically. For the materials listed the following properties are included where available:

a. Yield Strength (0.2% offset)
b. Tensile Strength
c. Elongation
d. Weld Tensile Strength
e. Stress-strain Diagram
f. Modulus of Elasticity
g. Impact Strength
m. Compressive Strength
o. Fatigue Strength

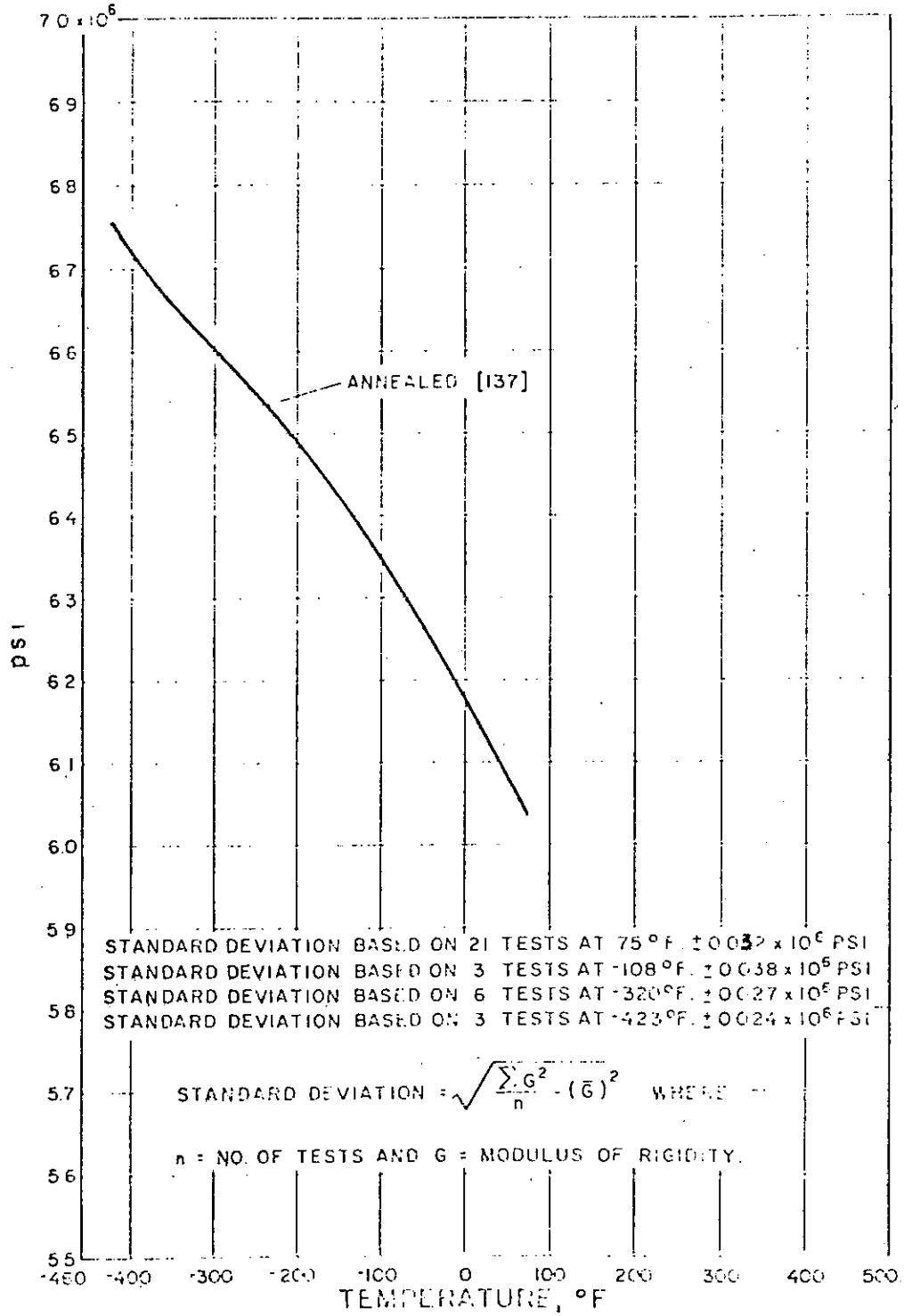
The data sheets marked "**" have been reproduced from:

"Cryogenic Materials Handbook"
AD 609 562
F.R. Swartzberg, et al.
The Martin Company
Denver, Colorado
August 1964

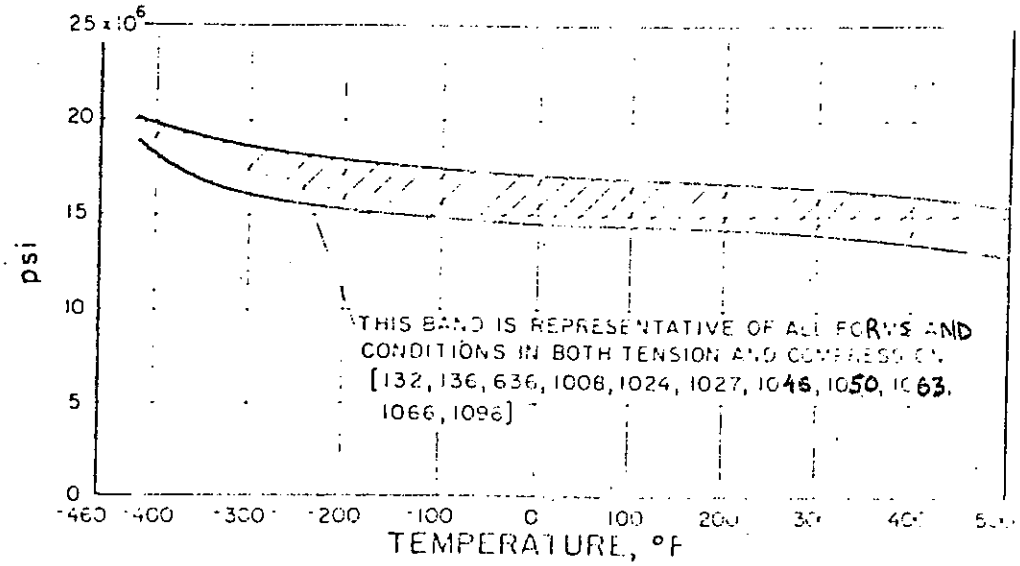
The attached list of references are given as the original sources of the material presented in the above document.



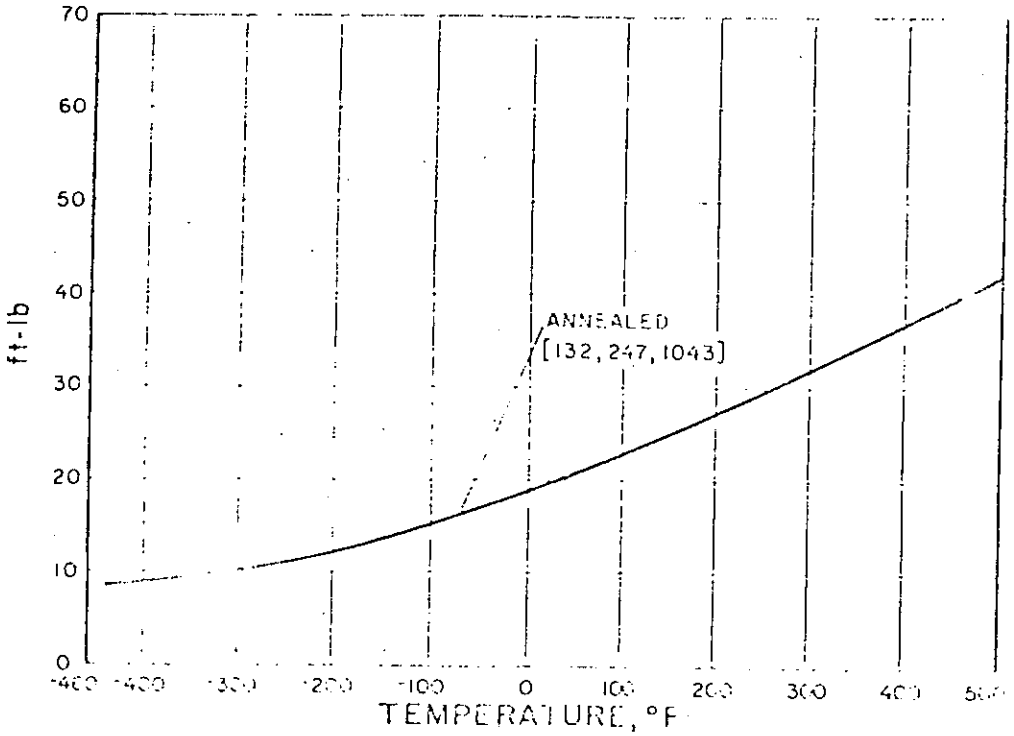
STRESS-STRAIN DIAGRAM FOR C-120-AV TITANIUM



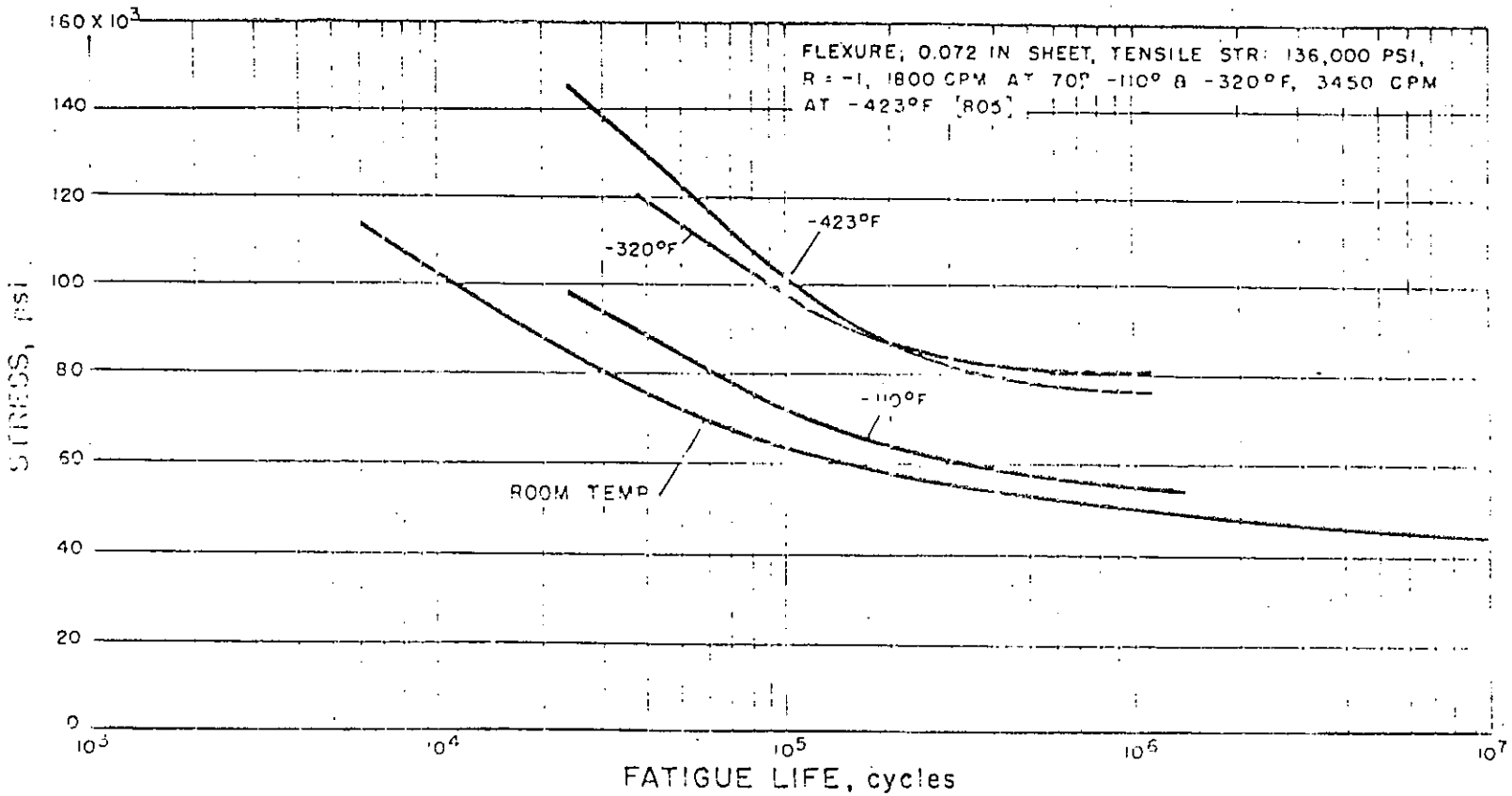
MODULUS OF RIGIDITY OF C-120-AV TITANIUM



MODULUS OF ELASTICITY OF C-120-AV TITANIUM



IMPACT ENERGY OF C-120 AV TITANIUM



FATIGUE BEHAVIOR OF C-120-AV TITANIUM