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DIAPHRAGMS
A SELECTED BIBLIOGRAPHY

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INTRODUCTION

This selective bibliography contains 135 references on design and manufacture of metallic diaphragms including a complete search on bursting diaphragms. The bibliography covers period from 1920 to 1965, and includes unclassified reports and titles from open literature.

The following sources were used: Technical Abstracts Bulleti (DOD) 1952-1965, Scientific and Technical Aerospace Reports (NASA) 1962-1965, Applied Mechanics Reviews 1948-1965, Applied Science and Technology Index 1958-1965, Industrial Arts Index 1940-1965, Engineering Index 1940-1965.

Mater al is arranged alphabetically under personal or corporate author.

DIAPHRAGMS
A SELECTED BIBLIOGRAPHY

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1. Baskevitch, N.
EFFECTIVE AREA OF DIAPHRAGMS. Machine Design, v. 30, Aug. 7, 1958, p. 124.

2. Bell Aerosystems Co., Buffalo, N.Y.
RESEARCH ON ZERO-GRAVITY EXPULSION TECHNIQUES. Second Quarterly Progress Report (covering period Aug. 1, 1961 to Nov. 1, 1961), by A. Krivetsky, (and others) 23 p. NASA-N62-11555.

3. Bendix Corp., Baltimore, Md.
BAROMETRIC CAPSULE, by E. I. Atkinson, Dec. 24, 1964. AD-455353.

4. Bestchorn, R.
RUPTURE DISKS AND SAFETY MEMBRANES. Technik, v. 2, 1947, p. 93-95.

5. BETTER DIAPHRAGMS FOR AIRCRAFT COMPONENTS. Aviation Week, v. 53, Sept. 18, 1950, p. 21.

6. Binnie, A. M.
STRESSES IN THE DIAPHRAGMS OF DIAPHRAGM-PUMPS. Quart. Appl. Math., v. 2, 1944, p. 37-42.

7. Black, Sivals and Bryson, Ardmore, Okla.
AN INVESTIGATION OF THE ABILITY OF RUPTURE DISKS TO PREVENT EXPLOSIONS OF COMPRESSED AIR RECEIVERS, by M. D. Creech. Engineering Dept. Rept., Jan. 25, 1940.

8. Bonyun, M. E.
FRANGIBLE DISKS AS PROTECTION FOR PRESSURE VESSELS. Amer. Inst. Chem. Eng., Trans., v. 31, 1935, p. 256-277.

9. Bonyun, M. E.
PROTECTING PRESSURE VESSELS WITH RUPTURED DISKS, Chem. and Met. Eng., v. 42, 1935, p. 260-263.

10. Borg, S. F.
RUPTURE INSTABILITY OF PLANE MEMBRANES AND SOLIDS, Am. Soc. Mech. Eng., Trans., v. 82E (J.Appl.Mech.), 1960, p. 501-504.

11. Brenaiin, A.
NEUGESCHAFFENE VERWENDUNGSMOEGLICHKIETEN FUER METALLMEMBRANEN, Wärme, v. 64, Apr. 19, 1941, p. 171-176.

12. Brombacher, W. G. and T. W. Lashof.
BIBLIOGRAPHY AND INDEX ON DYNAMIC PRESSURE MEASUREMENT.
National Bureau of Standards Circular 558, 1955.

13. Brombacher, W. G. and C. J. Jenny.
SOME FACTORS AFFECTING PERFORMANCE OF CORRUGATED DIAPHRAGM CAPSULES HAVING DEFLECTION NONLINEAR WITH PRESSURE. Am. Soc. Mech. Eng., Paper 58-A169.

14. Brown, W. F. and G. Sachs.
STRENGTH AND FAILURE CHARACTERISTICS OF THIN CIRCULAR MEMBRANES. Am. Soc. Mech. Eng., Trans., v. 70, 1948, p. 241-251.

15. Brown, W. F. and F. C. Thompson.
STRENGTH AND FAILURE CHARACTERISTICS OF METAL MEMBRANES IN CIRCULAR BULGING. Am. Soc. Mech. Eng., Trans., v. 71, 1949, p. 575-586.

16. Caldwell, F. R. and E. F. Fioch.
SOME FACTORS INFLUENCING THE PERFORMANCE OF DIAPHRAGM INDICATORS OF EXPLOSION PRESSURES. J. Res. Nat. Bur. Standards, v. 26, 1941, p. 175-196.

17. Campbell, C., W. B.Littler, and C. Whitworth.
THE MEASUREMENT OF PRESSURES DEVELOPED IN EXPLOSION WAVES. Roy. Soc. (London) Proc., v. 137, 1932, p. 380+

18. Carter, B. C.
MEASUREMENT OF SURFACE STRAINS IN DIAPHRAGMS. Engineering, v. 168. 1949, p. 581-583.

19. Chrysler Corp., Detroit, Mich.
LEAKAGE AND STRUCTURAL QUALIFICATIONS TESTS OF THE REDSTONE TACTICAL BODY PRESSURE BULKHEAD ASSEMBLY, report on Field Artillery Guided Missile System, Redstone, by A. J. Howell, Feb., 1957, 50 p. AD-290580.

20. Corbett, S. E.
CORRELATION OF THEORY AND EXPERIMENT IN FREE FORMING OF CLAMPED CIRCULAR DIAPHRAGMS SUBJECT TO EXPLOSIVE LOADING. Sheet Metal Ind., v. 41, 1964, p. 485-491.

21. David Taylor Model Basin, Washington, D.C.
DAMAGE-DISTANCE RELATIONS FOR THIN STEEL DIAPHRAGMS TWENTY INCHES IN DIAMETER TO NONCONTACT UNDERWATER EXPLOSIONS, by C. T. Johnson. Rept. 611, 1949.

22. David Taylor Model Basin, Washington, D.C.
EXPLORATORY TESTS ON SMALL STEEL DIAPHRAGMS SUBJECTED TO NONCONTACT EXPLOSION ATTACK, by C. T. Johnson. Rept. 610, 1949.

23. David Taylor Model Basin, Washington, D.C.
A METHOD FOR DETERMINING THE ENERGY ABSORPTION OF THIN STEEL DIAPHRAGMS UNDER HYDROSTATIC LOADING, by M. A. Greenfield. Rept. 248, 1944, pt. 1, p. 1-10.

24. Delmonte, J.
A VERSATILE MINIATURE FLUSH-DIAPHRAGM PRESSURE TRANSDUCER. Instr. Soc. Am., Proc., v. 7, 1952, p. 174-177.

25. Detroit Arsenal, Center Line, Mich.
LIFE TEST OF EXPERIMENTAL DIAPHRAGM MATERIALS. Final Rept., by Alex M. Calaluca. July, 1957. 1 v. Rept. no. 3945, AD-141105.

26. Draper, C. S. and Y. T. Li.
A NEW HIGH-PERFORMANCE ENGINE INDICATOR OF THE STRAIN GAUGE TYPE. J. Aeronaut. Sci., v. 16, 1949, p. 593-610.

27. Dressler, R. F.
BENDING AND STRETCHING OF CORRUGATED DIAPHRAGMS. Am. Soc. Mech. Eng., Trans., v. 81D, (J. Basic Eng.), 1958, p. 651-659.

28. DUAL DIAPHRAGM SIMPLIFIES FUEL SYSTEM. Prod. Eng., v. 31, Jan. 18, 1960, p. 50.

29. Engl, W.
HOW TO DETERMINE THE EFFECTIVE AREA OF DISK DIAPHRAGM. (in German) Regelungstech, v. 7, May1959, p. 165-168.

30. English Electric Co., Ltd., Great Brit.
INVESTIGATION AND DEVELOPMENT OF HIGH PRESSURE BURSTER DISKS AND DIAPHRAGMS, by A. M. Freeman. Rept. LM.V-005, 1956.

31. Flindt, C. B.
THEORY OF RESTRAINED CORRUGATED DIAPHRAGMS. Engineer, v. 202, 1956, p. 193-195.

32. Geotechnical Corp., Garland, Tex.
IMPROVED SHAKE-TABLE SYSTEM, by S. F. Griffin and J. C. Moore. June 1964, 51 p. Rept. no. TR64 78, AD-446578.

33. Gitlin, R.
HOW TEMPERATURE COMPENSATION CAN BE USED. Control Eng., v. 2, June 1955, p. 71-75.

34. Glayzal, A.
PLASTIC DEFORMATION OF CIRCULAR DIAPHRAGM UNDER PRESSURE. Am.Soc. Mech. Eng., Trans., v. 70 (J. Appl. Mech.), 1948, p. A288-A296.

35. Goddall, S. E. and R. B. Smith.
INSTANTANEOUS FLUID-PRESSURE RECORDING EQUIPMENT. Engineering, v. 148, 1939, p. 127.

36. Grinstead, C. E. (and others).
AN IMPROVED INDICATOR FOR MEASURING STATIC AND DYNAMIC PRESSURES. S.A.E. Journal, v. 52, 1944, p. 534-556.

37. Haringx, J. A.
DESIGN OF CORRUGATED DIAPHRAGMS. Am. Soc. Mech. Eng., Trans., v. 79, 1957, p. 55-64.

38. Haringx, J. A.
NON-LINEARITY OF CORRUGATED DIAPHRAGMS. Appl. Sci. Res. A, v. 6, 1956, p. 45-52.

39. Hemes, E. C.
SYNTHETIC DIAPHRAGMS FOR GAS METERS. Gas Age, v. 123, June 11, 1959, p. 22-24.

40. Hill, R.
A THEORY OF THE PLASTIC BULGING OF A METAL DIAPHRAGM BY LATERAL PRESSURE. Phil. Mag., v. 41, 7th Ser., 1950, p. 1133-1152.

41. Hudson, G. E.
THEORY OF THE DYNAMIC PLASTIC DEFORMATION OF A THIN DIAPHRAGM. J. Appl. Phys., v. 22, 1951, p. 1-11.

42. Iberall, A. S.
CHARACTERISTICS OF SLACK DIAPHRAGMS. Am. Soc. Mech. Eng., Paper 54-A195.

43. IMPROVEMENTS IN OR RELATING TO POROUS DIAPHRAGMS. G.B. Pat. 868,837.

44. IMPROVEMENTS IN OR RELATING TO METHODS OF MANUFACTURING THIN DIAPHRAGMS, AND DIAPHRAGMS MADE ACCORDING TO THESE METHODS. G.B. Pat. 856,230.

45. Jackson, A. K.
DUAL STEEL DIAPHRAGMS DEVELOP HIGH GRIPPING FORCES IN A CLAMPING SYSTEM. Machine Design, v. 31, August 6, 1959, p. 109.

46. Jaffee, R. I., E. T. Beidler, and R. H. Ramsey.
FORMING AND HEAT TREATMENT OF CORRUGATED DIAPHRAGMS. Am. Soc. Metals Trans., v. 41, 1949, p. 460-479.

47. Jania, Z. and A. Kueshigian.
HOW ROTATION AFFECTS HYDRAULIC PRESSURES. Machine Design, v. 27, Feb. 1955, p. 180-188.

48. Kankel, A. V. and D. C. Whitten.
CORRUGATED METAL DIAPHRAGM PERFORMANCE. Am. Soc. Mech. Eng., Ann. Meet., Chicago, Nov., 1955, Paper 55-A115, 13 p.

49. Kowalskii, B. S. and V. P. Fedotov.
DESIGN OF SAFETY DIAPHRAGMS (KRASCHETU PREDOKHRANITEL'NYKH MEMBRAN). Prikladnaia Mekhanika, v. 1, no. 4, 1965, p. 113-119. In Russian.

50. Kyoto U. (Japan)
TRIPLE-DIAPHRAGM TYPE HYPERSONIC SHOCK TUNNEL, by G. Kamimoto, T. Akamatsu, and T. Hasegawa, Jan., 1962. 33 p. NASA N64-15985.

51. Lake, C. F. and N. P. Inglis.
DESIGN AND MANUFACTURE OF BURSTING DISKS. Inst. Mech. Eng., Proc., v. 142, 1940, p. 365-378.

52. Lake, C. F. and N. P. Inglis.
THE DESIGN AND MANUFACTURE OF BURSTING DISKS. Engineering, v. 148, 1939, p. 58-60, 88-89.

53. Lee, G. H. and L. M. VanderPyl.
BIBLIOGRAPHY ON DIAPHRAGMS AND ANEROIDS. Am. Soc. Mech. Eng., Paper 55-A180.

54. Levkoeva, N. V.
THE INFLUENCE EXERCISED BY REYNOLDS NUMBERS ON THE MAGNITUDES OF THE COEFFICIENTS OF RESISTANCE OF DIAPHRAGMS (in Russian). Izv. Vyssh. Uchebn. Zavedenii., Aviats. Tekh. no. 2, 105-112, 1959, Ref. Zh. Mekh. no. 4, 1960, Rev. 4772.

55. Li, Y. T.
DESIGN OF STRAIN GAGE PRESSURE INDICATORS. Instr. Soc. Am., Proc., v. 7, 1952, p. 216-221.

56. Liu, F. F.
DYNAMIC RESPONSE BEHAVIOR OF DIAPHRAGMS IN RELATION TO THE DRIVING FUNCTION AND SURROUNDING MEDIA. Am. Soc. Mech. Eng., 8 p. Paper 58-A224.

57. Lyon, F. H. and Grover , H. J.
SOME SUGGESTIONS FOR RESEARCH IN DIAPHRAGM TECHNOLOGY. Am. Soc. Mech. Eng., 9 p., Paper 56-A221.

58. Maghdi, P. M.
BENDING OF ELASTOPLASTIC CIRCULAR PLATE WITH LARGE DEFLECTION. J. Appl. Mech., v. 19, 1952, p. 293-300.

59. Martin-Marietta Corp., Denver, Colo.
EXPANDABLE SPACE STRUCTURE. Interim rept., 1 Nov. 62-31 Jan. 63, on Semirigid or Nonrigid Structures for Space Applications, by P. M. Knox, Jr., A. Corell and E. Lane. Jan., 1963, 137 p. Rept. no. ASD-CR-63-4 AD-296899.

60. Massachusetts Institute of Technology
A SUMMARY OF DIAPHRAGM TEST RESULTS OBTAINED IN THE SHOCK TUBE LABORATORY, by A. Witmer, L. Beals, and W. Herrmann. June 1954, 19 p., Rpt. no. 2 AD-42478.

61. Mellor, P. B.
STRETCH FORMING UNDER FLUID PRESSURE. J. Mech. and Phys. Solids, v. 5, Nov. 1956, p. 41-56.

62. Mellor, P. B.
THE ULTIMATE STRENGTH OF THIN-WALLED SHELLS AND CIRCULAR DIAPHRAGMS SUBJECTED TO HYDROSTATIC PRESSURE. Intern. J. Mech. Sci., v. 1, 1960, p. 216-228.

63. METAL DIAPHRAGMS TRANSMIT TORQUE. Machine Design, v. 33, Dec. 21, 1961, p. 100.

64. METHODS OF MAKING THIN REINFORCED DIAPHRAGMS AND IN DIAPHRAGMS MADE ACCORDING TO THESE METHODS. U. S. pat. 3,089,235.

65. Miles, D. O.
DIRECT MECHANICAL DETERMINATION OF THE DYNAMIC RESPONSE OF DIAPHRAGMS. J. Acoustic. Soc. Am., v. 36, 1964, p. 1471-1478.

66. Minneapolis-Honeywell Regulator Co., Minn.
METAL EXPULSION DIAPHRAGM DEVELOPMENT FOR SPHERICAL PROPELLANT TANKS. Final Rept., by M. W. Cardullo, Dec., 1962, 44 p. NASA CR-50846, Rept. 2869-TR1, NASA N63-19991.

67. Muller, W.
HIGH-PRESSURE HIGH-STROKE DIAPHRAGM MECHANISM. Engineer, v. 198, 1954, p. 602-603.

68. Muller, W.
IMPROVEMENTS IN OR RELATING TO HIGH-PRESSURE DIAPHRAGMS. G. B. pat. 690,945.

69. Murphy, G., and R. T. Othmer.
ANALYTICAL STUDIES AND EXPERIMENTAL INVESTIGATIONS OF THE CONSTRUCTION AND PERFORMANCE CHARACTERISTICS OF FLUSH DIAPHRAGM PRESSURE PICKUPS. Iowa State Coll., Eng. Exper. Station., Oct., 1949.

70. Murphy, T. S.
DETERMINING NEEDED RELIEVING CAPACITY FOR RUPTURE DIAPHRAGMS. Chem. and Met. Eng., v. 51, Dec., 1944, p. 99-103.

71. Murphy, T. S.
RUPTURE DIAPHRAGMS CHARACTERISTICS, USES AND SIZE CALCULATION. Chem. and Met. Eng., v. 51, Nov., 1944, p. 108-112.

72. Nakayama, Y., and H. Endo.
DIAPHRAGM TYPE AIR-MICROMETER.I STATIC CHARACTERISTICS.
Bull. Japan Soc. Mech. Eng., v. 2, 1959, p. 210-217.

73. National Advisory Committee for Aeronautics.
CORRUGATED METAL DIAPHRAGMS FOR AIRCRAFT PRESSURE-MEASURING INSTRUMENTS. NACA TN-738, 1939.

74. National Advisory Committee for Aeronautics.
DEVELOPMENT OF A DETONATION DETECTOR SUITABLE FOR USE IN FLIGHT, by C. S. Draper (and others), 1944, NACA TN-977.

75. National Advisory Committee for Aeronautics.
DIAPHRAGMS FOR AERONAUTIC INSTRUMENTS, by M. D. Hersey, 1923, NACA TR-165.

76. National Advisory Committee for Aeronautics.
HIGH FREQUENCY PRESSURE INDICATORS FOR AERODYNAMIC PROBLEMS, by Y. T. Li, 1953, NACA TN-3042.

77. National Advisory Committee for Aeronautics.
A HIGH-SPEED ENGINE PRESSURE INDICATOR OF THE BALANCED DIAPHRAGM TYPE, by H. C. Dickinson and F. E. Newell, 1920, NACA TR-107.

78. National Advisory Committee for Aeronautics.
INVESTIGATION OF THE DIAPHRAGM-TYPE PRESSURE CELL, by T. Theodorsen, 1931, NACA TR-388.

79. National Advisory Committee for Aeronautics.
THE LIMITING USEFUL DEFLECTIONS OF CORRUGATED METAL DIAPHRAGMS, by W. A. Wildhack and V. H. Goerke, 1942, NACA TN-876.

80. National Advisory Committee for Aeronautics.
MATERIALS FOR SLACK DIAPHRAGMS, by T. Puschmann, 1940, NACA TM-964.

81. National Advisory Committee for Aeronautics.
A MINIATURE ELECTRICAL PRESSURE GAGE UTILIZING A STRETCHED FLAT DIAPHRAGM, by J. L. Patterson, 1952, NACA TN-2659.

82. National Advisory Committee for Aeronautics.
NONMETALLIC DIAPHRAGMS FOR INSTRUMENTS, by H. N. Eaton and C. T. Buckingham, 1925, NACA TN-206.

83. National Advisory Committee for Aeronautics.
SYLPHON DIAPHRAGMS, A METHOD FOR PREDICTING THEIR PERFORMANCE FOR PURPOSES OF INSTRUMENT DESIGN, by H. N. Eaton and G. H. Keulegen. NACA TN-90.

84. National Advisory Committee for Aeronautics.
TEMPERATURE COEFFICIENT OF THE MODULUS OF RIGIDITY OF AIRCRAFT INSTRUMENT DIAPHRAGM AND SPRING MATERIALS, by W. G. Brombacher and E. R. Melton, 1930, NACA TR-358.

85. National Advisory Committee for Aeronautics.
TENSION EXPERIMENTS ON DIAPHRAGM METALS, by H. B. Henrickson, 1927, NACA TN-261.

86. National Aeronautics and Space Administration.
EXPERIMENTAL DAMPING OF LIQUID OSCILLATIONS IN A SPHERICAL TANK BY POSITIVE-EXPULSION BAGS AND DIAPHRAGMS, by A. J. Stofan and A. J. Pavli. July, 1962, 19 p. (NASA TN D-1311) NASA N62-14068.

87. National Aeronautics and Space Administration.
SOME PROBLEMS IN FLANGING AND BEADING MEMBRANES, by B. V. Grigoryev, June, 1960, 13 p. AD-238241 NASA TTF-32.

88. Naval Boiler and Turbine Lab., Philadelphia, Pa.
AMERICAN RESEARCH AND MANUFACTURING CORP. APPA GAUGE CALIBRATOR MODEL P-1372. Evaluation Rept., by Y. J. Fostyk, Sept., 1961, 12 p. AD-263928.

89. Naval Ordnance Lab., White Oak, Md.
THE EXPLOSIVE RELEASE OF GAS GUN DIAPHRAGMS, by F. A. Montgomery and E. E. Kilmer, Mar., 1962, 20 p. (Ballistics research rept. no. 58; NOLTR 61-165) AD-276911 NASA N62-12993.

90. Naval Ordnance Lab., White Oak, Md.
THE DEVELOPMENT OF AN EXPLOSIVE HIGH-PRESSURE RELEASE, by R. A. Montgomery and E. E. Kilmer, Aug., 1961, 20 p. (Ballistics research rept. no. 37) NAVWEPS Rept. no. 7327. AD-265 559.

91. New York University.
THE IMPACT TUBE: DYNAMIC PRESSURE-STRAIN RESULTS ON CIRCULAR DIAPHRAGMS IN THE YIELD REGION, by G. Gerard, H. Slater, and R. Papirno. Interim Tech. Rept., Oct., 1954, 43 p. (Rept. no. 277-2) AD-47 451.

92. Newell, F. B.
DIAPHRAGM CHARACTERISTICS. Am. Soc. Mech. Eng., 22 p., Paper 56-A220.

93. Newell, F. B.
DIAPHRAGM CHARACTERISTICS, DESIGN AND TERMINOLOGY. Am. Soc. Mech. Eng., 1958, 74 p.

94. Nilson, A. H.
SHEAR DIAPHRAGMS OF LIGHT GAGE STEEL. Am. Soc. Civil Eng., Proc., v. 86, Nov., 1960, no. 26501, p. 111-139.

95. North American Aviation, Inc., Downey, Calif.
BURST DIAPHRAGM RELIEF VALVE, by J. T. Bradley, May, 1962, 16 p. Rept. no. SFS 5-62-10, AD-293567.

96. North American Aviation Inc., Downey, Calif.
OFF LIMITS TEST REPORT - RUPTURE DISC RELIEF VALVE, by C. Seltzer, Aug., 1964, 1 v. Rept. no. CM229 IDEP 925 73 47F1 03. AD-457704.

97. Oak Ridge National Lab., Tenn.
PULSAFEEDER DIAPHRAGM STUDIES, by P. N. Stevens. Sept., 1953. CF-53-9-199.

98. Pfeiffer, A.
A NOTE ON THE THEORY OF CORRUGATED DIAPHRAGMS FOR PRESSURE-MEASURING INSTRUMENTS. Rev. Sci. Instr., v. 18, 1947, p. 660-664.

99. Penn, W. S.
MODERN MATERIALS FOR DIAPHRAGMS. Eng. Materials and Design, v. 5, 1962, p. 111-115.

100. Prescott, G. R.
RUPTURE-DISK DESIGN EVALUATION AND BURSTING TESTS. Am. Soc. Mech. Eng., Trans., v. 75, 1953, p. 355-359.

101. Pressey, D. C.
TEMPERATURE-STABLE CAPACITANCE PRESSURE GAUGES. J. Sci. Instr., v. 30, 1953, p. 20-24.

102. Roshko, A. and D. Baganoff.
A NOVEL DEVICE FOR BURSTING SHOCK-TUBE DIAPHRAGMS. Phys. of Fluids, v. 4, 1961, p. 1445-1446.

103. Rothfuss, N. B. (and others)
DESIGN AND APPLICATION OF METALLIC FLEXURES FOR EQUIPMENT WITH SPECIFIC LIFE REQUIREMENTS. Society of Automotive Engineers and American Society of Mechanical Engineers, Air Transport and Space Meeting, New York, Apr. 27-30, 1964, Paper 871A. 25 p.

104. Rothfuss, N. B.
METALLIC FLEXURES. Machine Design, v. 36, Sept. 10, 1964, p. 218-232.

105. Royal Aircraft Establishment, Gt. Brit.
CALCULATION OF THE RECOIL OF A SHOCK TUBE, by B. A. Woods, June, 1959, 16 p. AD-227 700.

106. Royal Aircraft Establishment, Gt. Brit.
DEVELOPMENT OF THE RAE SIX INCH DIAMETER SHOCK TUBE. PART I: BURSTING DIAPHRAGMS AT 200 ATMOSPHERES, by S. G. Cox, May, 1957, RAE TN Aero 2510.

107. Royal Aircraft Establishment, Gt. Brit.
HYDRAULIC TESTS OF THE 1000 ATMOSPHERES WORKING PRESSURE DIAPHRAGM SECTION INTENDED FOR RAE SIX INCH DIAMETER SHOCK TUBE, by S. G. Cox, June, 1963, 16 p. RAE-TN-AERO-2898. NASA X63-16725.

108. Royal Armament Research and Development Establishment, Gt. Brit.
THE R.A.R.D.E. NO. 3 HYPERSONIC GUN TUNNEL, by A. J. Cable and W. W. Fuller, Dec., 1963, 1 v. RARDE B14 63. AD-430 143.

109. RUBBERS, PLASTICS, METALS FOR DIAPHRAGMS. Engineering, v. 189, 1960, p. 406-407.

110. Sachs, G., G. Espey, and G. B. Kasik.
CIRCULAR BULGING OF ALUMINUM ALLOY SHEETS AT ROOM AND ELEVATED TEMPERATURES. Am. Soc. Mech. Eng., Trans., v. 68, 1946, p. 161-173.

111. Sachs, G. and J. D. Lubahn.
FAILURE OF DUCTILE METALS IN TENSION. Am. Soc. Mech. Eng., Trans., v. 68, 1946, p. 271-276.

112. Smith, S.
ON THE DEPRESSION OF THE CENTER OF A THIN CIRCULAR DISC OF STEEL UNDER NORMAL PRESSURE. Roy. Soc. Can., Trans., v. 16, 1922, p. 217-225.

113. Space and Information Systems Div., North American Aviation Inc., Downey, Calif.
VALVE, ISOLATION, BURST DIAPHRAGM, by A. M. Fine and R. Walker, Oct., 1964, 36 p. Spec. no. MC-251-0005 IDEP 925 20 72 07F1 02 AD-462593.

114. Stevens, H. H.
BEHAVIOR OF CIRCULAR MEMBRANES STRETCHED ABOVE THE ELASTIC LIMIT BY AIR PRESSURE. Soc. Experim. Stress Analysis, Proc., v. 2, 1944, p. 139.

115. Suffield Experimental Station, Canada.
SUFFIELD EXPIRIMENTAL STATION SHOCK TUBE INSTRUMENTATION. VIII. THE 1 1/4 x 1 1/4-IN. SHOCK TUBE, by J. C. Muirhead. Jan., 1962, 5 p. (Tech. note no. 69) AD-274234.

116. Sutton, G. P.
CHARTS FOR CIRCULAR DIAPHRAGM DESIGN. Prod. Eng., v. 18, Jan., 1947, p. 167-169.

117. Svensson, N. L.
THE BURSTING PRESSURE OF CYLINDRICAL AND SPHERICAL VESSELS. J. Appl. Mech., v. 25, 1958, p. 89-96.

118. Swartz, J. H.
NONMETALLIC DIAPHRAGMS, THEIR DESIGN AND APPLICATION. Machine Design, v. 20, June, 1948, p. 153-158, 206.

119. Takasaka, T. and T. Takagishi.
VIBRATION OF CORRUGATED DIAPHRAGMS. Bull. Japan Soc. Mech. Eng., v. 1, 1958, p. 215-221.

120. Taplin, J. F. and D. Comstock.
DIAPHRAGM SEALS. Machine Design, v. 36, June 11, 1964, p. 67-71.

121. Terner, E.
DIAPHRAGM FOR LIQUID-DRIVEN SHOCK TUBES. Rev. Sci. Instr., v. 32, 1961, p. 1059-1060.

122. Thielsch, H.
BULGE TESTING OF SHEET METAL. Metal Progr., v. 56, 1949, p. 86-88.

123. Thompson, J. C.
LOW-ALLOY STEEL FOR VIBRATING DIAPHRAGMS. Metal Progr., v. 81, March, 1962, p. 97-99.

124. U. S. Atomic Energy Commission.
LOW TEMPERATURE PERFORMANCE TESTS OF RUPTURE DIAPHRAGMS, by W. L. Richardson and G. S. Storer, 1948. AECD-2268.

125. Viola, H. E.
ELASTOMER-COATED FABRICS FOR DIAPHRAGMS. Machine Design, v. 34, Aug. 2, 1962, p. 118-122.

126. Wahl, A. M.
RECENT RESEARCH ON FLAT DIAPHRAGMS AND CIRCULAR PLATES WITH PARTICULAR REFERENCE TO INSTRUMENT APPLICATIONS. Am. Soc. Mech. Eng., Trans., v. 79, 1957, p. 83-87.

127. Way, S.
BENDING OF CIRCULAR PLATES WITH LARGE DEFLECTION. Am. Soc. Mech. Eng., Trans., v. 56, 1934, p. 627-636.

128. Weil, N. A. and N. M. Newmark.
LARGE PLASTIC DEFORMATIONS OF CIRCULAR MEMBRANES. J. Appl. Mech., v. 22, 1955, p. 533-538.

129. Weil, N. A.
RUPTURE CHARACTERISTICS OF SAFETY DIAPHRAGMS. J. Appl. Mech., v. 26, 1959, p. 621-624.

130. Westinghouse Electric Corp. Research Labs., Pittsburgh, Pa.
CREEP AND DEFLECTION TESTS OF ZIRCALOY DIAPHRAGMS, by E. H. Davis. Res. rept. 405FF226-R1. (AEC) NP-7788. Dec. 1958.

131. Westinghouse Electric Corp. Atomic Power Division, Pittsburgh, Pa.
PRESSURE-DEFLECTION AND FATIGUE PROPERTIES OF ZIRCALOY DIAPHRAGMS, by W. F. Losco (and others), July 1960, WAPD-T-1228.

132. Wexler, A. and W. Garland.
A PRELIMINARY REPORT ON THE INFLUENCE OF CORRUGATED SHAPE OF THE DEFLECTION-PRESSURE RELATIONSHIP OF CORRUGATED METAL DIAPHRAGMS. Natl. Bureau of Standards Rept. June 30, 1952.

133. Whitten, D. C.
TEN WAYS TO USE DIAPHRAGMS AND CAPSULES. Prod. Eng., v. 29, Feb. 17, 1958, p. 92-93.

134. Wildhack, W. A., R. F. Dressler and E. C. Lloyd.
INVESTIGATIONS OF THE PROPERTIES OF CORRUGATED DIAPHRAGMS. Am. Soc. Mech. Eng., Trans., v. 79, 1957, p. 65-82.

135. Wintergerst, E., and H. Lintz.
PROPERTIES AND APPLICATIONS OF METAL DIAPHRAGMS. Regelungstech, v. 7, May, 1959, p. 160-165. AEC Translation: SCL-T-347.