FORM U-1 MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS
As required by the Provisions of the ASME Code Rules

1. Manufactured by AMF BEAIRD, INC., SHREVEPORT, LOUISIANA
(Name and address of manufacturer)

2. Manufactured for STOCK
(Name and address of Purchaser)

3. Type Vert. (Horiz. or Vert.) Kind Tank (Tank, Jacketed, Heat Exch.) Vessel No. (208932) (Mfrs. Serial) (_____) (State & State No.) Natl. Bd. No. 81268 Yr. Built 1967

Items 4–9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

Outer sphere

4. SHELL: Material Non Code (Kind and Spec. No.) T.S. (Flg. or F.B. & Spec. Min. T.S.) Nominal Thickness In. Corrosion Allowance In. Diam. Ft. In. Length Ft. In.

5. SEAMS: Long (Welded, Dbl., Single, Lap, Butt) H.T. (Yes or No)[1] X.R. (Spot or Complete) Sectioned (Yes or No) Efficiency %
Single Vee Girth Weld W/B.Bar H.T. No X.R. No Sectioned No No. of Courses 1
If riveted describe seams fully on reverse side of form

6. HEADS: (a) Material SA-283-C T.S. 55,000# (b) Material T.S.

	Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Top & Bottom	3/16"					42.3125"		Concave
(b)									

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)

7. STAYBOLTS: (Material) If hollow (Size of Hole) Attachment (Threaded, Welded) Pitch (Horiz.) X (Vert.) Diam. (Nominal)

8. JACKET CLOSURE: (Describe as ogee & weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

9. Constructed for ~~max~~ Full Vac. ~~allowable working press.~~ psi. at max. temp. Amb. °F. Min. temp. (when less than −20°) -- °F. Hydrostatic / Pneumatic or Combination Test Press. -- psi.

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material (Kind & Spec. No.) Diam. (Subject to Pressure) In. Thickness In. Attachment (Welded, Bolted)
Floating. Material (Kind & Spec. No.) Diam. In. Thickness In. Attachment

11. TUBES: Material (Kind & Spec. No.) O.D. In. Thickness Inches or Gage Number Type (Straight or U)

Items 12–15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

Inner sphere

12. SHELL: Material Code (Kind and Spec. No.) T.S. (Flg. or F.B. & Spec. Min. T.S.) Nominal Thickness In. Corrosion Allowance In. Diam. * Ft. In. Length Ft. In.

13. SEAMS: Long (Welded, Dbl., Single, Lap, Butt) H.T. (Yes or No)[1] X.R. (Spot or Complete) Sectioned (Yes or No) Efficiency %
Girth Dbl. Butt H.T. Yes X.R. Complete Sectioned No No. of courses 1
SA-353-AFbx
If riveted describe seams fully on reverse side of form

14. HEADS: (a) Material A-300-4 T.S. 90,000# (b) Material T.S. (c) Material T.S.

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Top, bottom, ~~max~~	1/4"					33.125"		Concave
(b)	~~Shell~~ Nozzles (4) 1/4" (1) 3/4" (3) 1" Sch. 40 Seamless Pipes SA-312 T-304								Welded
(c)	~~Flanges~~								

If removable, bolts used (a) (b) (Material, Spec. No., T.S., Size, Number)
(c) Other fastening (Describe or Attach Sketch)

* Joint Eff. of sphere 100%

15. Constructed for max. allowable working press.[2] 339 psi. at max. temp. °F. Min. temp. (when less than −20°) -320 °F. Hydrostatic / Pneumatic or Combination Test Press. 509 psi.

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number 1 Size 4" Location Top of sphere

17. NOZZLES: Outer sphere Non Code

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
(1)	1/8"	6000# Cplg.	SA-105-II (4) 1/4" 150# Cplgs.		T-304 S.S.		Welded
(1)	3/4" (3)	1" Sch. 40	Seamless Pipes		SA-312 T-304		Welded
(1)	2" Sch. 40	Seamless Pipe	SA-53-B (1) 4" Flg. Type	Nozzle	SA-240 T-304		Welded

18. INSPECTION OPENINGS: Manholes, No. Size Location
Handholes, No. Size Location
Threaded, No. Size Location

19. SUPPORTS: Skirt (Yes or No) Lugs 4 (Number) Legs 3 (Number) Other (Describe) Attached Welded to sphere (Where & How)

20. REMARKS: One 66-3/4" O.D. 660 W.G. Inner Cryogenic Sphere ASME Code 1965 Edition and 85" O.D. Outer Sphere Non Code, per Beaird Dwg. 13-1D40

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc. State contents of each part.) (Over)

[1] If postweld heat-treated.
[2] List other internal or external pressures with coincident temperature when applicable.

FORM U-1 (back)

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Unfired Pressure Vessels.

Date 5-9 19 67 Signed AMF BEAIRD, INC. (Manufacturer) By W R Thomas

Certificate of Authorization Expires December 31, 1967

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY AMF BEAIRD, INC. at SHREVEPORT, LOUISIANA

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of N. B. and employed by THE COMMERCIAL UNION INSURANCE COMPANY of NEW YORK have inspected the pressure vessel described in this manufacturer's data report on 5-9 19 67, and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5-9 19 67

F A Zonkel
Inspectors Signature
F. A. Zonkel

Commissions N. B. COMM. 2660
Nat'l Board or State and No.

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of _____ and employed by _____ of _____ have compared the statements in this manufacturer's data report with the described pressure vessel and state that parts referred to as data items _____, not included in the certificate of shop inspection have been inspected by me and that to the best of my knowledge and belief the manufacturer has constructed and assembled this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code. The described vessel was inspected and subjected to a hydrostatic test of _____ psi.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____ 19 ____

_____ Commissions _____
Inspectors Signature Nat'l Board or State and No.