452.3 - ZODIAC 1922

VHD/ecb

453.3

Airplane Section.

Nov. 15, 1922.

Stress Analysis of Proposed Zodiac Airship Car Structure.

1. The attached drawings X-80766 and X-80768 showing the structure of car proposed for Army Zodiac Airship are forwarded with request that a stress analysis be made and forwarded to this Section as soon as practicable.

2. A weight statement on form M-2811 is also attached for your convenience; however, it is advised that the increased weight resulting from modifications and additions noted on the drawings, which are to be made effective, have not been included.

3. It is desired to reduce the weight of the car as much as practicable and your suggestions in this connection will be appreciated.

4. A representative of this Section will cooperate in the work above requested, with a view to giving advice and necessary assistance to facilitate and expedite the work, in order that procurement data may be forwarded to the Chief of Air Service at the earliest possible time.

5. It is also requested that you advise this office as to the probable time when completion of this work may be expected.

H. A. STRAUSS,
Chief, Lighter-than-Air Section.

2 att.
Drwgs X-80766
X-80768

FILE COPY

COORDINATED:

DECLASSIFIED
Authority 917647

GENERAL FILES COPY
Eng. Div. A. S. 190-McCook Field-8-29-22-25M

HCC-FT

Lighter-than-Air Section

November 10, 1922.

Zodiac Fuel System.

1. Revised drawing X-80769 of the Zodiac fuel system has been approved by the Fuel Systems Branch.

GEO. E. A. HALLETT,
Captain, A.S.,
Chief, Power Plant Section.

COORDINATED:

DECLASSIFIED
Authority 917647

GENERAL FILES COPY

Eng. Div. A. S. 190-McCook Field-8-29-22-25M.

VHD-BR

453.3
Zodiac

McCook Field, Dayton, Ohio.

November 9, 1922.

Car Proposed for Zodiac by
the Airship Mfg. Company.

Chief of Air Service, Washington, D.C.

1. With reference to design of car for Zodiac Airship, as shown on attached drawings 3-001 and 3-002, submitted by the Airship Manufacturing Company with letter dated August 8, 1922, copy attached, the drawings are not sufficiently in detail to permit of complete and intelligent criticism. A complete weight statement is lacking and the weight estimated by the Contractor is considered to be about half of the actual weight.

2. This design does not meet the requirements of this Division for a car suitable for the Zodiac airship, and is, therefore, disapproved. The principal deficiencies noted in the design are as follows:

a Pilot's vision is seriously obstructed.

b No provisions made for adapting to military purposes such as gunners' cockpit, bomb racks, gun mounts, etc.

c Fuel capacity inadequate; should be at least 800 gallons.

d Excessive width.

e No provisions made for air supply system to ballonets.

f Water ballast capacity inadequate; should be at least 1000 lbs. and preferably greater.

g Drawings do not indicate that the car structure has been reinforced, where the load from the engine outrigger is concentrated.

For the Acting Chief of Division:

NOV 10 1922

DELOS C. EMMONS,
Chief, Production Engineering.

COORDINATED:

3 Incls.
Cy. ltr. 8-8-22
Cy. ca. b/p 3-001 and 3-002

DECLASSIFIED
Authority 917647

GENERAL FILES COPY

Eng. Div. A. S. 190-McCook Field-8-29-22-25M.

Eng. Div. A. S. 122-McCook Field-[illegible]22-5M

Cross Reference No.
452.3 - Zodiac
452.3 - Reconnaissance

CROSS REFERENCE RECORD

From: V. H. Dill - TFM-BR

To: Specifications & Standard Branch- Attn: Mr. Costello.

Cross Reference from No.: 400.11 - L/A.

Date 10/27/22-memo.

Subject or Substance of Reference:
RE: Changes in Spec. #2152 - Repairs and Liberty installation on Zodiac Airship - Spec. #2056-A - Short Range Reconnaissance Airship.

Submitting changes to be made in the above Specifications.

DECLASSIFIED
Authority 917647

FGO/eob

453.3

Power Plant Section.

Oct. 11, 1922.

Zodiac Airship (R-2) 330,000 cu. ft. Fuel Installation,
Drawing X-80769.

1. Drawing X-80769 (attached herewith) revised in accordance with recommendations submitted by Mr. Osborne of your Section, is submitted for your written approval and return to this Section.

V. H. DILL,
Acting Chief,
Lighter-than-Air Section.

1 att.
Drwg X-80769.

COORDINATED:

DECLASSIFIED
Authority 917647

GENERAL FILES COPY
Eng. Div. A. S. 190-McCook Field-8-9-22-8M

1st. Ind.

aug 25

FGO/eob

452.3.

Power Plant Section - Fuel System Branch.

Sept. 25, 1922.

Zodiac Airship (R-2) 330,000 cu. ft.,
Fuel Installation, Drwg X-80679.

1. Drawing X-80679 (attached herewith) showing proposed fuel installation diagram for the Zodiac (R-2) 330,000 cu. ft. airship, is submitted for your written approval and return to this Section.

1 att.
Drwg. X-80679.

V. H. DILL,
Acting Chief,
Lighter-than-Air Section.

DECLASSIFIED
Authority 917647

COORDINATED:

1st. Ind. aug 25

Major Norman W Peek, A S Representative, c/o Goodyear Tire and Rubber Company, Akron, Ohio. To Chief Engineer, Engineering Division, A S McCook Field, Dayton, Ohio. RETURNED

1. This office does not approve the proposed design of car to replace the old Zodiac car, for the following reasons:

(a) Shortening the car cuts down the efficiency of the suspension system. The old Zodiac car is about eleven feet longer.

(b) No suspension points are shown, and if the extreme forward and rear suspensions are attached at the nose and tail of car, as they will have to be for a car of this length, no suitable place can be selected for the gunners cockpit, owing to the interference to firing caused by these suspensions.

(c) Pilots vision is seriously obstructed.

(d) Water Ballast capacity (500#) is inadequate, and should not be less than 1200#. A capacity of 2000# would be desirable.

(e) Propeller diameter should be at least 11'-6" instead of 9'-0", to get maximum efficiency.

(f) No provision is made for armament

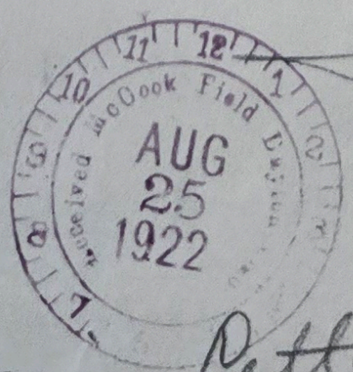
(g) Drag rope compartments aretoo small. Provision should be made to carry at least one - 300 ft 3/4" rope

(h) Mechanics compartment trapdoor should open sideways.

2. The foregoing criticism indicates that serious consideration has not been given to the fundamental principles of Lighter-Than-Air Engineering. Furthermore the design submitted is not sufficiently detailed to permit of a complete and intelligent criticism, one of the most important items omitted being a complete weight statement.

Lighter-Than-Air-Section

AUG 28 1922 T L B V M C



Norman W Peek

Major Air Service

DECLASSIFIED
Authority 917647

Basic Letter - aug 16
1 att - aug 8-22

Eng. Div. A. S. 304-McCook Field-6-19-22-20M

HH-BR

WAR DEPARTMENT
AIR SERVICE
ENGINEERING DIVISION
OFFICE OF THE CHIEF OF DIVISION

McCOOK FIELD, DAYTON, OHIO
August 16, 1922.

Subject: Zodiac Car Drawings.

To: Mr. T.L. Blakemore, Eng. Div. Representative,
c/o Goodyear Tire and Rubber Company, Akron, Ohio.

1. Enclosed herewith are copy of letter from The Airship Manufacturing Company of America and blueprints of proposed design of car to replace the old Zodiac car.

2. It is requested that your opinion of this design be returned together with prints as soon as practicable.

For the Acting Chief of Division:

Delos C. Emmons
DELOS C. EMMONS,
Chief, Production Engineering.

3 Incls.
Cy. Let. 8/8/22
2 Blueprints No. 3-001
" 3-002.

1 att. Aug 8-1922

DECLASSIFIED
Authority 917647

CROSS REFERENCE

August 8, 1922.

From: The Airship Mfg. Co. of America,
Hammondsport, N. Y.

To: Engineering Division, Air Service, Aeronautics,
McCook Field, Dayton, Ohio.

Enclosures: Drawing 3-002, General Construction of Car.
Drawing 3-001, Showing side elevation of Zodiac Car.

Subject: Dirigible Car for Zodiac.

1. Whereas the proposition of replacing the old Zodiac car seems to have failed, and whereas the repaired Zodiac car could not possibly fill the requirements, the above drawings are hereby submitted. It is noted that this car is of Monocoque construction, being as nearly streamlined as possible and greatest strength per weight, and is the ample space for pilot mechanics war load or passengers as required.

2. This car has been submitted to the Air Service at Washington and has met with the approval of all concerned, but it was the request of Major Van Nostrand that this drawing should be submitted to Dayton for comments and approval of the Engineering Division.

3. Mr. Fulton, from Washington, is in Hammondsport at the present time and is going over this proposition with the Engineers before returning to Washington. An opinion of the Engineering Division at Dayton will be appreciated and it is hoped that this opinion can be returned at an early date.

Received McCook Field Dayton Ohio
AUG 25 1922

Yours very truly,

C C WITMER

THE AIRSHIP MFG. CO. OF AMERICA.

copy

DECLASSIFIED
Authority 917647

Inclosures

att to - 1st Ind - Aug 25 -

Eng. Div. A. S. 122-McCook Field-6-19[illegible]-4M.

Cross Reference No.
452.3 - Zodiac

CROSS REFERENCE RECORD

From: H. H. Hodson.

To: Airship Mfg. Co. of America, Hamondsport, N.Y.

Cross Reference from No.: 520.133-Order.

Date 8/16/22
8/8/22-Airship Mfg.Co.

Subject or Substance of Reference:
Re: Curves on Suspension Girts on Zodiac.

It is recommended that you lay out curves (as outlined in your letter of 8/8/22)as catenary.

It is understood that the resultant curves will approximate the curves shown on French drawings.

DECLASSIFIED
Authority 917647

C. C. WITMER BECKWITH HAVENS JAMES F. BOYL

THE AIRSHIP MANUFACTURING COMPANY OF AMERICA

HAMMONDSPORT, N. Y.

452.3

August 8, 1922.

Lighter-Than-Air-Section

AUG 11 1922

From: The Airship Mfg. Co. of America,
Hammondsport, N. Y.

To: Engineering Division, Air Service, Aeronautics,
McCook Field, Dayton, Ohio.

Enclosures: Drawing 3-002, General Construction of Car.
Drawing 3-001, Showing side elevation of Zodiac Car.

Subject: Dirigible Car for Zodiac.

1. Whereas the proposition of replacing the old Zodiac car seems to have failed, and whereas the repaired Zodiac car could not possibly fill the requirements, the above drawings are hereby submitted. It is noted that this car is of Monocock construction, being as nearly stream lined as possible and greatest strength per weight, and is the ample space for pilot mechanics war load or passengers as required.

2. This car has been submitted to the Air Service at Washington and has met with the approval of all concerned, but it was the request of Major Van Norstand that this drawing should be submitted to Dayton for comments and approval of the Engineering Division.

3. Mr. Fulton, from Washington, is in Hammondsport at the present time and is going over this proposition with the Engineers before returning to Washington. An opinion of the Engineering Division at Dayton will be appreciated and it is hoped that this opinion can be returned at an early date.

Received McCook Field Dayton Ohio. AUG 11 1922

Yours very truly,

CCWitmer

THE AIRSHIP MFG. CO. OF AMERICA.

CCW:E

Copy in 452.3-114

DECLASSIFIED
Authority 917647

452.3

CROSS REFERENCE RECORD

Divisional Planning Section.

May 11, 1922.

Amendment of E.O. 630-33.

1. It is requested that E.O. 630-33, covering design and construction of propeller for the Zodiac Airship equipped with Liberty Engine be amended to include the following:-

Test by Propeller Branch, Airplane Section, of Zodiac Propeller, Drawing X-39544, with Liberty hub. Inspection No. 02477, A.S. No. 22-1030. Destruction test, 10 hours, 50% overload. Additional cost $325.00.

H. A. STRAUSS,
Major, A.S.,
Chief, Lighter-than-Air Section.

DECLASSIFIED
Authority 917647

Eng. Div. A. S. 122-McCook Field-10-[illegible]-6500.

Cross Reference No.
452.3 - Zodiac

CROSS REFERENCE RECORD

From: F. W. Caldwell.

To: M. S. Smith

Cross Reference from No.: 452.025 - Propellers

Date 5/1/22-Memo

Subject or Substance of Reference:

Advise the present propeller for the Zodiac stands up satisfactorily on whirling test, the order for the second propellers can be put through, and the two propellers held subject to the disposition of the B/A Division for use on the Zodiac Airship.

DECLASSIFIED
Authority 917647

Eng. Div. A. S. 122-McCook Field-10-2[illegible]500.

Cross Reference No.
452.3 - Zodiac

CROSS REFERENCE RECORD

From: G. W. Carr

To: Chief of Air Service, Washington, D. C.

Cross Reference from No.: Order No. 520,135

Date 3/23/22
3/18/22-Wittemann Air Corp'n

Subject or Substance of Reference:

Wittemann Aircraft Corp'n. requests three blue prints, Drawing Nos. 1826, 1832, and 1834 for Zodiac. Eng. Div. advises the C.A.S. that these drawings were contained in the original shipment which went forward and an additional set was forwarded through their office. Advise this office has taken the liberty of forwarding these drawings direct, to relieve the situation in the present emergency.

DECLASSIFIED
Authority 917647

McCOOK FIELD
DAYTON, OHIO.

3rd Ind. MQC/eob

Air Service, Engineering Division, McCook Field, Dayton, O., March 15, 1922.-
Chief of Air Service, Washington, D. C.

1. Forwarded. Three blue prints each of Fort Omaha drawings numbered 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820 and 1824 are being forwarded by mail, for transmission to District Manager, Balloon Production and Inspection, C/o Goodyear Tire & Rubber Co., Akron, O., as requested in basic communication.

2. This Division has no record of a general specification having been issued covering this equipment, which was contracted in your office. Three copies of a specification, which is understood to have been furnished The Airship Manufacturing Co. of America and Connecticut Aircraft Co., to govern the manufacture of the fabric on Air Service Orders 520074 and 520133, respectively, are also forwarded.

3. It is requested that this specification be forwarded to the District Manager if applicable to the above mentioned orders.

THURMAN H. BANE,
Major, A. S.,
Chief of Division.

By:

DELOS C. EMMONS,
Major, A. S.,
Chief, Production Engineering.

CENTRAL FILES
EOB

DECLASSIFIED
Authority 917647

2nd Ind.

WBF:KA

War Department, O.C.A.S., Washington, D.C. March 6, 1922. To: Chief, Engineering Division, Air Service, McCook Field, Dayton, Ohio. (Thru Liaison Officer)

1. RETURNED, advising that the records here indicate that the Zodiac drawings were furnished both the Connecticut Aircraft Company and Airship Manufacturing Company of America, by the Engineering Division. There is attached for your information copy of a letter of July 28th from the Connecticut Aircraft Company in which they acknowledge receipt of these drawings. There is also attached copy of letter from this office of July 8th in which you were requested to forward a complete set of Zodiac drawings to these concerns.

2. It is believed that upon further investigation you will be able to determine just what drawings you forwarded.

By direction of the Chief of Air Service.

R. M. JONES,
Major, Air Service,
Chief, Procurement Section.

2 incls.
Cy.let 7-28-21
" " 7-8-21

By: W. V. Andrews,
W. V. ANDREWS
1st Lieut., A.S.

DECLASSIFIED
Authority 917647

February 18, 1922.

District Manager, Balloon Production & Inspection.

Chief, Engineering Division, Air Service, McCook Field, Dayton, Ohio.

Specifications and Drawings.

1. It is requested that this office be furnished with three copies each of all drawings, plans and specifications of the Zodiac envelopes which the Connecticut Aircraft Company and the Airship Manufacturing Company are to manufacture Zodiac envelopes in accordance with.

THOMAS S. BALDWIN,
Thomas S. Baldwin, A.E.
District Manager,
Balloon Production & Inspection.

1st Ind. DCE VH

A. S. Eng. Div., McCook Field, Dayton, Ohio. March 2, 1922 - To: Chief of Air Service, Washington, D. C.

1. FORWARDED, requesting that this office be advised as to whatprints were furnished the Contractor, so that copies thereof may be forwarded to the District Manager, Balloon Production & Inspection, as requested in original communication.

2. Information is further requested as to whether the attached fabric specification was furnished to the Contractor thru official channels and made a part of their contract.

T. H. BANE,
Major, A.S.,
Chief of Division.

By:

D. C. Emmons,
D. C. EMMONS,
Major, A.S.,
Chief, Production Engineering Section.

1 att.

DECLASSIFIED
Authority 917647

C O P Y

THE CONNECTICUT AIRCRAFT COMPANY
NEW HAVEN CONN.

July 28, 1921

Office of the General Manager

Office of the Chief of Air Service, War Dept., Airship & Balloon Division, Washington, D. C.

Additional Drawings needed - Zodiac Envelope - Order 520133.

1. We have received, from the Engineering Division, at McCook Field, Dayton, Ohio, a number of drawings for Zodiac envelope. There are, however, no drawings covering the construction of machine gun tunnel in the prints furnished us.

2. As we are preparing to build and have made for us the various wood parts entering into the construction of the gun tunnel for this contract, we urgently request that the complete drawings covering the machine gun tunnel, be sent to us at once.

3. It is also necessary for us to know in advance the widths of the cloth which will be furnished for both the envelope and ballonet fabrics.

4. Kindly let us have the information asked for herein at the earliest moment.

Respectfully,

THE CONNECTICUT AIRCRAFT CO.

C. F. Smyth
General Manager.

DECLASSIFIED
Authority 917647

C O P Y

July 8, 1921.

The Chief of Air Service.

Air Service Engineering Division, McCook Field,
Dayton, Ohio. (Thru Liaison Officer).

Re Zodiac Airship Drawings.

1. It is requested that one (1) complete set of Zodiac Airship drawings be sent to each of the following Companies which are now under contract to make envelopes, surface, or repair cars for this type of ship:-

Witteman Aircraft Corporation, Hasbrouck Hts., Hasbrouck, N.J.
Airship Manufacturing Company, Hammondsport, N.Y.
Aerial Service Corporation, Hammondsport, N.Y.
Connecticut Aircraft Company, New Haven, Conn.

2. The drawings sent to these concerns should of course be those which have been translated into English, and it is desired that this office be informed when these drawings are forwarded.

By direction of the Chief of Air Service.

C. G. HALL
Colonel, A.S.
Chief, Procurement Division.

DECLASSIFIED
Authority 917647

PS/FMK/eob

May 18, 1921.

SPECIFICATIONS FOR ZODIAC AIRSHIP FABRICS,
Styles 22, 28, 29 and 30.

****

1. The following specifications shall govern the construction of fabric and tape for the Zodiac Airship:

OUTSIDE TAPE, STYLE 22, WIDTH 1 5/8"

CONSTRUCTION	Wt., oz. per sq.yd.
Outside proofing and aluminum	1.7
Cloth, bias, BB grade	2.5
Inside proofing	1.0
Uncured gum	2.5
Total	7.7
Maximum allowable weight	8.0
Minimum allowable weight	7.0
Tensile Strength, minimum, straight direction,	
Warp	45 lbs.per in.
Filler	45 " " "

BODY FABRIC, 3-PLY, STYLE 28

CONSTRUCTION	
Outside proofing and aluminum	1.5
Outside ply, straight, FF cloth	3.4
Gas film, rubber	1.8
Middle ply, bias, FF cloth	3.4
Gas film, rubber	3.5
Inside ply, straight, FF cloth	3.4
Inside proofing, rubber	0.5
Total	17.5
Maximum allowable weight	18.0
Minimum allowable weight	17.0
Tensile Strength, minimum,	lbs.per in.
Straight	
Warp	140
Filler	140
Bias	
Warp	90
Filler	90
Permeability, maximum litres	15

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Authority 917647

UNDERSUSPENSION FABRIC, 3-PLY, STYLE 29

CONSTRUCTION		Wt., oz. per sq.yd.
Outside proofing and aluminum		1.0
Outside ply, straight, FF cloth		3.4
Gas film, rubber		1.6
Middle ply, bias, FF cloth		3.4
Gas film, rubber		2.5
Inside ply, straight, FF cloth		3.4
	Total	15.3
Maximum allowable weight		15.6
Minimum allowable weight		14.6
Tensile Strength, minimum,		lbs.per in.
Straight		
Warp		140
Filler		140
Bias		
Warp		90
Filler		90
Permeability, maximum	Litres	20

BALLONET FABRIC, STYLE 30.

CONSTRUCTION		
Cloth, air side, bias		2.0
Gas film, rubber		3.5
Cloth, gas side, straight		2.0
Gas side proofing, rubber		0.5
	Total	8.0
Maximum allowable weight		8.5
Minimum allowable weight		7.5
Tensile Strength, minimum		lbs.per in.
Straight		
Warp and filler, each,		30
Bias		
Warp and filler, each		30
Permeability, maximum	Litres	15

2. Inside tape for this airship shall conform to Specification 16,013-A, style No. 12. Its width shall be two (2) inches.

3. The cure of these fabrics shall be as low as is practicable and possible within the specification limits for permeability.

DECLASSIFIED
Authority 917647

4. The cloth to be used in construction of this fabric and tape shall be furnished by the Government from cloth finished with "Balloon finish", or material that has been thus finished and subsequently semi-bleached.

5. The fabric and tape shall conform in point of material, manufacture, tests and inspection to Specification 16013-A.

Copied
McCook Field,
Dayton, O., 2/25/22
WDB/ecb

DECLASSIFIED
Authority 917647

WAR DEPARTMENT, AIR SERVICE
Engineering Division
McCOOK FIELD DAYTON, OHIO

1/22

Deliver to Prod. Sec

Thru Mr Jungkuntz

FOR

..... Necessary Action	..... Note and return
..... Preparation of Reply	..... Note and file
..... Recommendation	..... Compliance
..... Investigation and Report	..... Information desired
..... Your Information	..... Attention

..... Note and forward to next on list

REMARKS:

To ascertain from C & S by indorsements on these papers
(a) What points have been furnished Contractor & therefore to be furnished
Dist mgr B. P. & D
(b) whether attached fabric spec was furnished officially to contractor

From B & A Bell

DO NOT USE FOR SCRATCH PAD

Eng. Div. A. S. 600-McCook Field-11-1-21-80M.

GEAH-MM.

file

4523

Chief Engineer.

2-8-22.

1. Referring to attached correspondence on the Zodiac airship, it was for this project that this Division was requested many months ago to experiment with a Liberty engine developing 280-h.p., instead of 400-h.p., and carburetors set to give maximum economy.

2. Low compression Liberties certainly should not be used as their fuel consumption is high. In my opinion, two Liberty engines of standard Army compression with pistons drained, electric starters, primers, new oil pumps, 85A carburetor altitude control changes, and special small chokes and jets as recommended in Power Plant Report, Serial No. 1732, should be used in the Zodiac airship.

2. Regarding the propellers, you probably know more about them than I do.

GEO. E. A. HALLETT,
Captain, A. S.,
Chief, Power Plant Section.

atts.

2. Forwarded, requesting that this office be advised as to what prices were furnished the Contractor, so that copies thereof may be forwarded to the District Manager, Balloon Production & Inspection, as requested in original communication.

2. Information is further requested as to whether the attached fabric specification was furnished to the Contractor thru official channels and made a part of their contract.

T. H. BANE,
Major, A. S.,
Chief of Division.

By:

D. C. EMMONS,
Major, A. S.,
Chief, Production Engineering Section.

file

1 att.

DECLASSIFIED
Authority 917647

400.11-A

AIR SERVICE

OFFICE OF THE DISTRICT MANAGER

BALLOON PRODUCTION AND INSPECTION

PROCUREMENT SECTION, SUPPLY DIVISION

AKRON, OHIO

February 18, 1922.

From: District Manager, Balloon Production & Inspection.

To: Chief, Engineering Division, Air Service, McCook Field, Dayton, Ohio.

Subject: Specifications and Drawings.

1. It is requested that this office be furnished with three copies each of all drawings, plans and specifications of the Zodiac envelopes which the Connecticut Aircraft Company and the Airship Manufacturing Company Company are to manufacture Zodiac envelopes in accordance with.

McCOOK FIELD

Thomas S. Baldwin, A.E.
District Manager,
Balloon Production & Inspection.

DAYTON, OHIO

1st Ind. DCE VH

A. S. Eng. Div., McCook Field, Dayton, Ohio. March 2, 1922 - To: Chief of Air Service, Washington, D. C.

1. FORWARDED, requesting that this office be advised as to what prints were furnished the Contractor, so that copies thereof may be forwarded to the District Manager, Balloon Production & Inspection, as requested in original communication.

2. Information is further requested as to whether the attached fabric specification was furnished to the Contractor thru official channels and made a part of their contract.

T. H. BANE,
Major, A. S.,
Chief of Division.

By: D. C. EMMONS,
Major, A. S.,
Chief, Production Engineering Section.

1 Incl.

1 att.

DECLASSIFIED
Authority 917647

400.11-A

AIR SERVICE

OFFICE OF THE DISTRICT MANAGER

BALLOON PRODUCTION AND INSPECTION

PROCUREMENT SECTION, SUPPLY DIVISION

AKRON, OHIO

February 18, 1922.

From: District Manager, Balloon Production & Inspection.

To: Chief, Engineering Division, Air Service, McCook Field, Dayton, Ohio.

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McCOOK FIELD

Thomas S. Baldwin, A.E.
District Manager,
Balloon Production & Inspection.

DAYTON, OHIO

1st Ind. DCE VH

A. S. Eng. Div., McCook Field, Dayton, Ohio. March 2, 1922 - To: Chief of Air Service, Washington, D. C.

1. FORWARDED, requesting that this office be advised as to what prints were furnished the Contractor, so that copies thereof may be forwarded to the District Manager, Balloon Production & Inspection, as requested in original communication.

2. Information is further requested as to whether the attached fabric specification was furnished to the Contractor thru official channels and made a part of their contract.

T. H. BANE,
Major, A. S.,
Chief of Division.

By: D. C. EMMONS,
Major, A. S.,
Chief, Production Engineering Section.

1 Encl.

1 att.

DECLASSIFIED
Authority 917647

ADDRESS REPLY TO
DISTRICT MANAGER
BALLOON PRODUCTION AND INSPECTION
PROCUREMENT SECTION, SUPPLY DIVISION
ARMY OFFICE
CARE OF GOODYEAR TIRE AND RUBBER CO
AKRON, OHIO

AIR SERVICE

OFFICE OF THE DISTRICT MANAGER

BALLOON PRODUCTION AND INSPECTION
PROCUREMENT SECTION, SUPPLY DIVISION
AKRON, OHIO

IN REPLY PLEASE QUOTE
FILE No. 453.3

Zodiac

January 25, 1922.

From: District Manager, Balloon Production & Inspection.

To: Chief, Engineering Division, Air Service, McCook Field, Dayton, Ohio.

Subject:

Zodiac

Attention - Matt Corbett.

1. The writer is leaving tonight for Buffalo, N.Y., to inspect Order 65-22 contracted with the Irving Air Chute Company, Buffalo, N.Y. My address while there will be c/o Irving Air Chute Company, Teck Theatre Bldg., Buffalo, N.Y. I will proceed from there to the Airship Manufacturing Company of America, Hammondsport, N.Y.

2. It is requested that Mr. Thomas Blakemore meet me at Hammondsport, N.Y., to settle the question of seaming, taping of the Zodiac Envelope on Air Service Order #520074 and to survey the Zodiac Car which the Aerial Service Corporation are repairing. on Air Service Order #520139. We will then proceed to New Haven, Conn., to assist the Connecticut Aircraft Company in the production of the Zodiac Envelope on Air Service Order #520133, the four Supply Balloons on Air Service Order #520137 and the four A.P.Observation Balloons on Order #520127.

3. If you write me care of the Irving Air Chute Company or the Airship Manufacturing Company of America request that you send a copy to the Akron office.

4. It is requested that you have Mr. Blakemore bring all available specifications on Hemp rope.

Thomas S. Baldwin.
Thomas S. Baldwin, A.E.
District Manager,
Balloon Production & Inspection.

1 Encl.

Try + get Mr. Blakemore to Hammondsport by Feb. 4th, 5th or 6th or earlier if possible.

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Eng. Div. A. S. 122-McCook Field-10.[illegible]6500.

Cross Reference No.
Order No. 520,133
452.3 - Zodiac Envelope

CROSS REFERENCE RECORD

From: District Manager, Balloon Production & Inspection, Akron, Ohio.

To: Chief, Eng, Div., Air Service, McCook Field, Dayton, Ohio.

Cross Reference from No.: Order No. 520,127

Date 2/24/22
1/24/22-Distr.Mgr. Akron to Conn. Aircraft Co.
1/24/22-Distr.Mgr.Akron to C.O.A.S.

Subject or Substance of Reference:

The District Manager advises the C.A.S. and the Conn. Aircraft Co. that during a recent three day conference with the Eng, Div. it was decided that he and a representative from the En , Div. should visith the Airship Mfg. Co. of American Hammondsport, N. Y. and the Conn. Aircraft Co., New Haven, Conn and go thoroughly into details with them in regard to the Zodiac Envelopes and then if it is deemed necessary, will request that the Zodiac Envelope at Langley Field be inflated for Inspection. Suggested that Mr. Blakemore's travel orders include the Conn. Aircraft Co. in order that the questions on the manufacturing of the Zodiac Envelope at that factory may be settled.

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