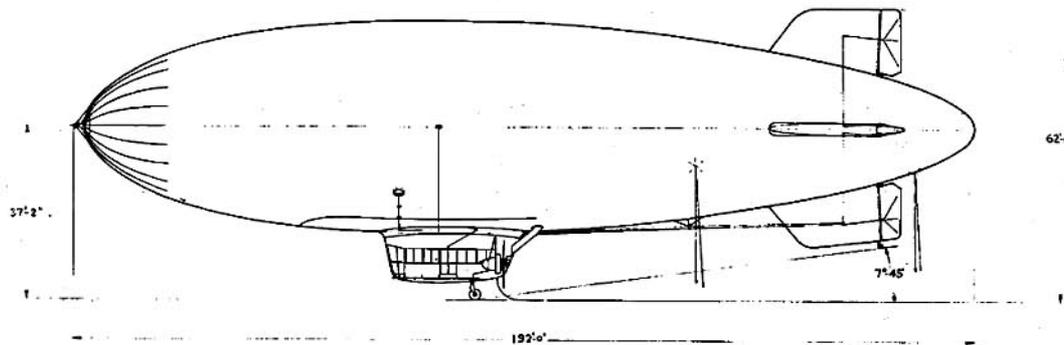
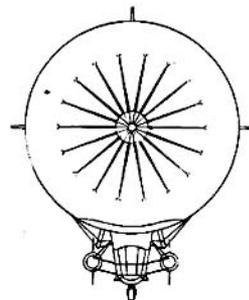


STANDARD AIRCRAFT CHARACTERISTICS
ZTG

ENVELOPE VOLUME	196,700 CU. FT.
FINENESS RATIO	4.2
BALLONET VOLUME	48,500 CU. FT.
NUMBER OF BALLONETS	2
HORIZONTAL EMPENNAGE	718 SQ. FT.
VERTICAL EMPENNAGE	547 SQ. FT.



58'-6"



0 10 20 FT
SCALE

DESCRIPTIVE ARRANGEMENT

MISSION AND DESCRIPTION

The mission of the ZTG airship is training and utility. The envelope is made of three-ply fabric and has the usual attachments. The car is suspended by a combination of internal and external suspension.

The car has a framework of aluminum alloy box girders with a covering of aluminum sheet and fabric.

Normal crew of five men.

WEIGHTS

Loadings Lbs. L.F.

EMPTY.....9250.....
 STAT. LIFT *..11800.....
 STAT. † MAX.
 DYN. LIFT....12800.....

97% inflated at .062 lb/cu.
 ft.

All weights are actual

POWER PLANT

No. & MODEL.....(2) R-670-6
 MFR.....Cont.
 SUPERCH.....None
 PROP. GEAR RATIO.....D.D.
 PROP. MFR.....Hartzell
 PROP. DES. NO.....915-B-44
 NO. BL./DIA.....2/8'-9"

RATINGS

Bhp @ Rpm @ Alt.
 NORM. 220 2075 S.L.

SPEC. 1017-A

FUEL AND OIL

GAL.	NO. TANKS	LOCATION
400	4	CAR, FIXED
80	2	CAR, SLIP

FUEL GRADE..... 73
 FUEL SPEC.....AN-F-48

OIL

CAPACITY (GALS).....19
 SPEC.....AN-O-8
 GRADE.....1120

ORDNANCE

NONE

DIMENSIONS

GAS VOLUME.....196700 cu. ft.
 BALLONETS.....49500 cu. ft.
 LENGTH.....192'-0"
 HEIGHT.....62'-0"
 WIDTH.....53'-6"
 MAX. DIA.....45'-4"

ELECTRONICS

Transmitter.....G F 11
 Receiver.....R U 16
 Homing Rec.....R U 18



PERFORMANCE SUMMARY				
LOADING CONDITION		(1)	(2)	
		TRAINING	UTILITY	
TAKE-OFF WEIGHT	Lbs.	11,800	12,800	
HEAVINESS	Lbs.	0	1,000	
USEFUL LOAD	Lbs.	2,550	3,550	
SERVICE LOAD	Lbs.	1,500	1,500	
FUEL AND OIL	Lbs.	1,050	2,050	
MAXIMUM SPEED	Kn.	53	53	
PRESSURE HEIGHT	Ft.	1,000	1,000	
TIME TO PRESS. HT.	Min.	1.0	1.2	
TAKE-OFF RUN, CALM	Ft.	0	615	
PATROL RANGE/SPEED	N.Mi./Kn.	350/40	670/40	
PATROL RADIUS/SPEED	N.Mi./Kn.	140/40	270/40	

NOTES

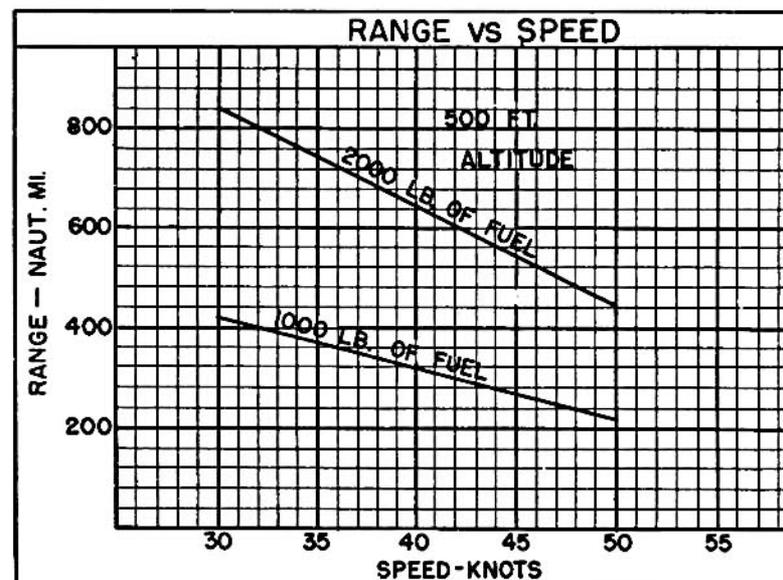
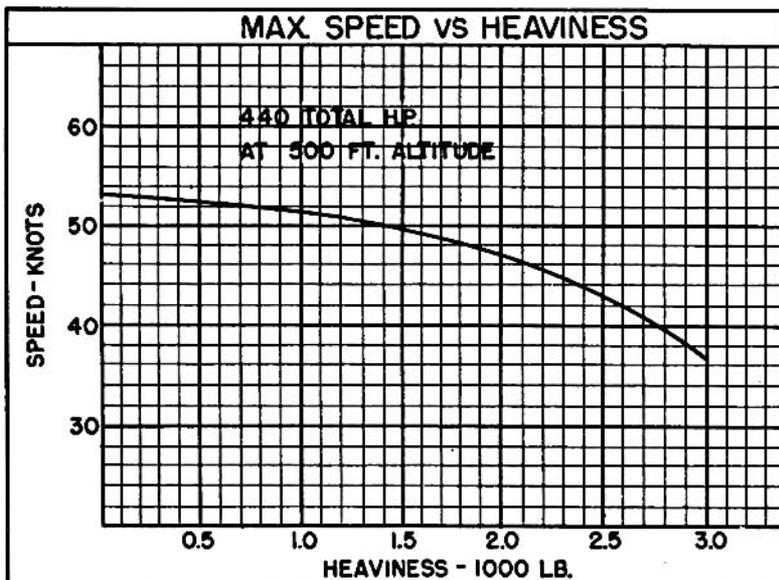
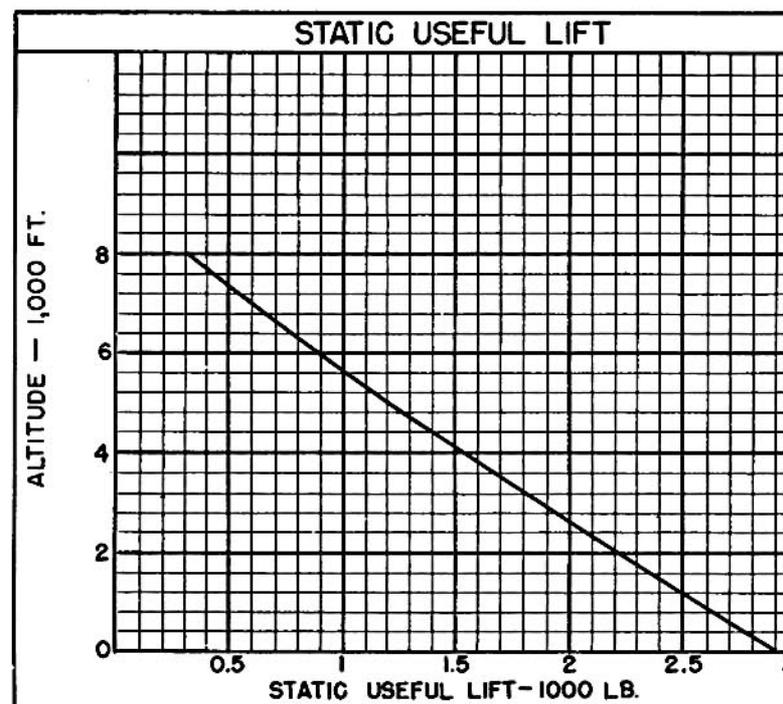
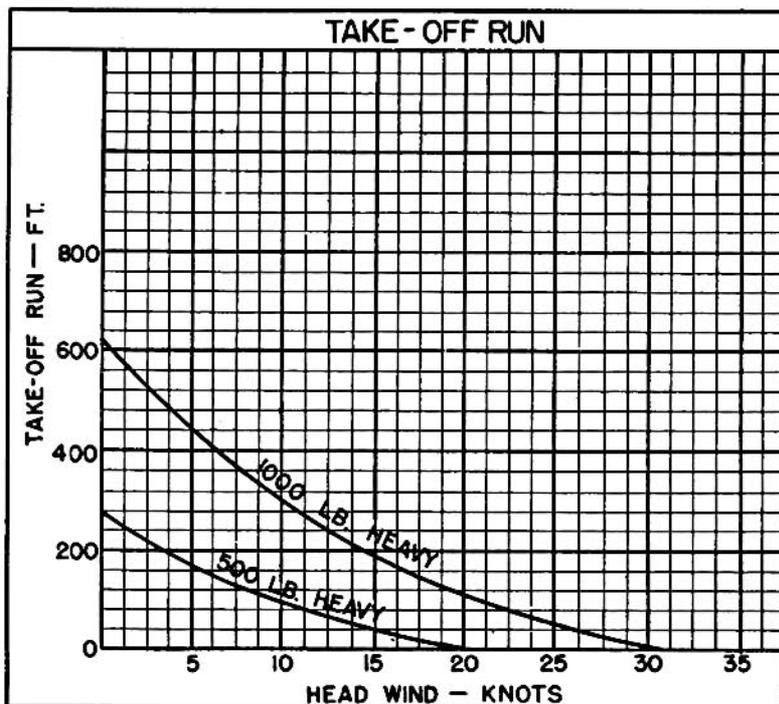
- Performance is based on flight test of airship G-2.

- Range and radius are based on flight test fuel consumption increased by 5%.

- Performance is based on inflation with helium, lifting .062 lb/cu. ft. at sea level.

- Gas fullness at sea level is 97.1% for pressure height of 1000 ft.

- Patrol radius is 40% of patrol range.



○ LOADING CONDITION COLUMN NUMBER.

NOTES

All figures for lift of the airship are based upon inflation with helium lifting .062 lb. per cu. ft. at sea level in the standard N.A.C.A. atmosphere.

The static lift in flight is independent of altitude and temperature so long as helium is not valved and there is no superheat (i.e. the air and gas are at equal temperatures).

The gross and useful lifts of the fully inflated airship diminish with altitude in the standard atmosphere at the rate of approximately 3% of the gross lift per 1000 feet.

In the absence of superheat the lift of the fully inflated airship at a given altitude varies inversely as the air temperature at the rate of approximately 1% of the gross lift per 5° F.

In all conditions of inflation, so long as gas is not valved, the lift varies directly with the superheat at approximately 1% per 5° F. The lift of the fully inflated airship is not, however, increased by rising gas temperature unless the altitude is reduced as necessary to avoid loss of gas by valving.