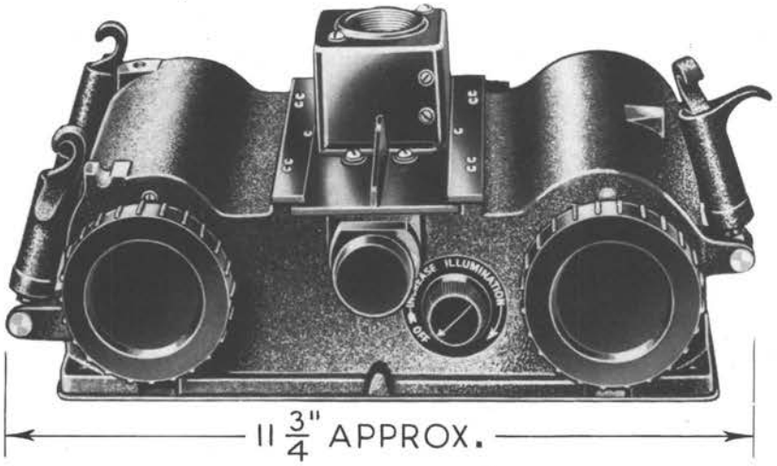
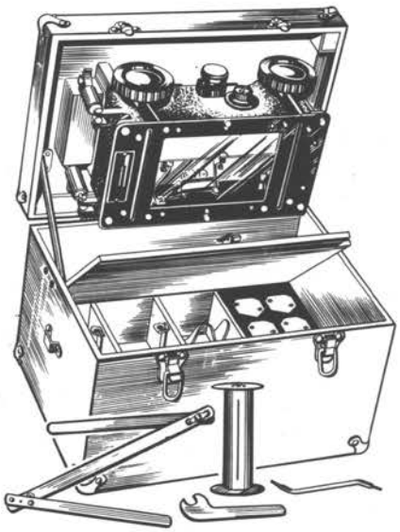




ASTROGRAPH
ARMY TYPE A-1

NAMES: Astrograph—navigator Astrograph assembly

DESCRIPTION: The astrograph is an instrument used to quickly and accurately determine the airplane's position during flight, with reference to the stars. The instrument contains a film with a representation of the heavens. This representation is projected onto a chart on the navigator's table by a lamp contained within the instrument. When used in connection with data obtained from an almanac, the instrument is used to obtain the location of the airplane on the chart.

The original installation can be made at a height of 22⅜" above the chart, or at a distance of 16⅜". Specially designed folding gages are used to measure this distance. When the installation is made, a lamp to suit the particular height must be selected. Four lamps are furnished with the instrument; one lamp and spare for each mounting height.

Charts and film are not included, and must be obtained separately. Spare glass plates, and wrenches for adjusting the height, are provided. Support is provided by the mounting ring described on page 254.

CHARACTERISTICS:

Dimensions (of case)	approximately 14½ by 11 by 10 inches
Dimensions (instrument)	approximately 11¾ by 6¼ by 5½ inches
Weight	approximately 5½ pounds
Distance from bottom to table with long lamp	22⅜ inches
Distance from bottom to table with short lamp	16⅜ inches

ARMY

A. E. REFERENCE NUMBER: 60-1075
SPECIFICATIONS: Detail 94-27404
TYPE DESIGNATION: A-1
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit, including accessories, but less film. Gross weight, approximately 15¾ pounds.

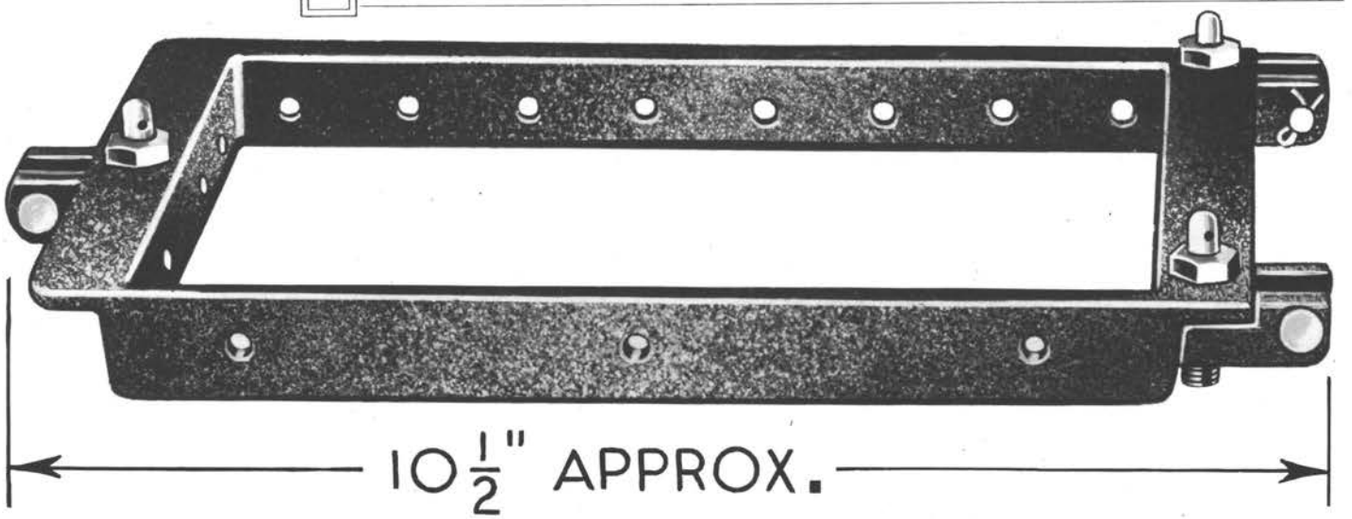
NAVY

TYPE DESIGNATION: A-1
SPECIFICATIONS: Detail . . . . . Navy uses Army specification
F. S. S. C. STOCK NUMBER: 88-A-650
TECHNICAL DATA: BuAer Handbook of Aircraft Instruments—Chapter 8.
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Eastman Kodak Co.	U-8144	U-8144	A-N-B	6200026050	05-35-19	106B/12
Sperti, Inc.	A-12	A-12	A-N-B	6200026075	05-35-19	106B/12

NOTE: British reference number for astrographs now manufactured in United Kingdom are:
6B/182 for Mark 1A (bottom 22.3 inches above table).
6B/183 for Mark 1B (bottom 16.3 inches above table).



RING—ASTROGRAPH MOUNTING

NAME: Astrograph mounting ring

DESCRIPTION: This is a metal rectangular ring used to mount and support the Army type A-1 astrograph. It is permanently mounted in the aircraft, and is furnished with an extra receptacle. British or American instruments may be mounted interchangeably on British or American mounting rings, but the electrical receptacle on the ring is not interchangeable.

CHARACTERISTICS:

Dimensions.....approximately 10 by 6½ by 1 inches
Weight.....approximately ¾ pound

ARMY

A. E. REFERENCE NUMBER: 60-1076

SPECIFICATIONS:

Detail.....94-27404
Superseded.....27404

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

Dimensions of carton.....approximately 7 by 11 by 1⅞ inches
Gross weight.....approximately 1 pound

NAVY

SPECIFICATIONS:

Detail.....Navy uses Army specification

F. S. S. C. NUMBER: 88-R-500

PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Eastman Kodak Co.	U-8149	A-N-B	6200310625	05-35-19	106B/33
Sperti, Inc.	S-100	A-N-B	6200310615	05-35-19	106B/33

NOTE: British stores reference number is 6B/184.

2 3/8" APPROX.

CLOCK—7 JEWEL—LIGHTED

ARMY TYPE A-9

NAMES: 7 jewel lighted clock
Clock, type A-9 (aircraft—1⅞ inch round dial)
Clock—8-day
Eight-day clock
Airplane clock
Navigation clock

DESCRIPTION: The Army type A-9 clock has a square flange and a vented aluminum case. The dial is provided with an individual bulb for illumination.

The clock has an eight-day movement and a sweep second hand. The winding knob is located in the lower left corner of the case.

CHARACTERISTICS:

Size.....round dial, 1⅞ inches diameter
Weight.....approximately ⅗ pound
Movement.....8-day, 7-jewel, stem wind, back ratchet and stem set
Dial markings.....radioactive luminous
Dial type.....12-hour

ARMY

A. E. REFERENCE NUMBER: 60-1100
SPECIFICATIONS:
General.....94-27220
Detail.....27879
TYPE DESIGNATION: A-9
A. S. C. STOCK NUMBER: 6000052750 (procurement stock number)
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Not under procurement for initial installation.
SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Longines-Wittnauer Watch Co., Inc.	63EA	A-B	6000052500	05-1-9	106A/28	Single wire circuit, 3-volt rim lighting.
	63EAF	A-B	6000052510	05-1-9	106A/28	Single wire circuit, 3-volt rim lighting.
Kollsman Instrument Division	505SD-01	B-C			106A/25	For use on 2-wire, 12-volt aircraft, 3-volt rim lighting.
	505SD-05	B-C			106A/776	For use on 2-wire, 12-volt aircraft, 3-volt rim lighting.
	505S-01	B			106A/28	Single wire circuit, 3-volt rim lighting.

INTERCHANGEABILITY NOTE: AN5743-1 (A. E. Reference Number 60-1200; F. S. S. C. Number 88-C-583) is installationally interchangeable with the above models. It differs in that it is not individually lighted. Therefore, it is to be considered interchangeable if this lighting feature is adaptable.

CLOCK—8-DAY—ELAPSED TIME

ARMY TYPE A-10

NAMES: 8-day elapsed time clock
Jewel clock
Clock—13 jewel
Clock assembly—13 jewel
Clock—aircraft—8-day elapsed time
Chronoflite (fluorescent) clock
Clock, type A-10 (aircraft)
Eight-day clock
Airplane clock
Navigation clock

DESCRIPTION: This Army type A-10 clock, with an 8-day movement, is housed in a vented aluminum case.

It includes a chronograph mechanism (start-stop-fly back) with separate totalizer hand (60 minutes) and sweep second hand. An elapsed time dial with the start-stop-fly back control indicates hours and minutes elapsed, and has a time out feature.

CHARACTERISTICS:

Size	round dial, 2¾ inches diameter
Weight	approximately ¾ pound
Movement	chronograph type, 8-day, 13 jewel stem wind and set
Lighting	phosphorescent and radioactive luminous markings
Dial type	12-hour

ARMY

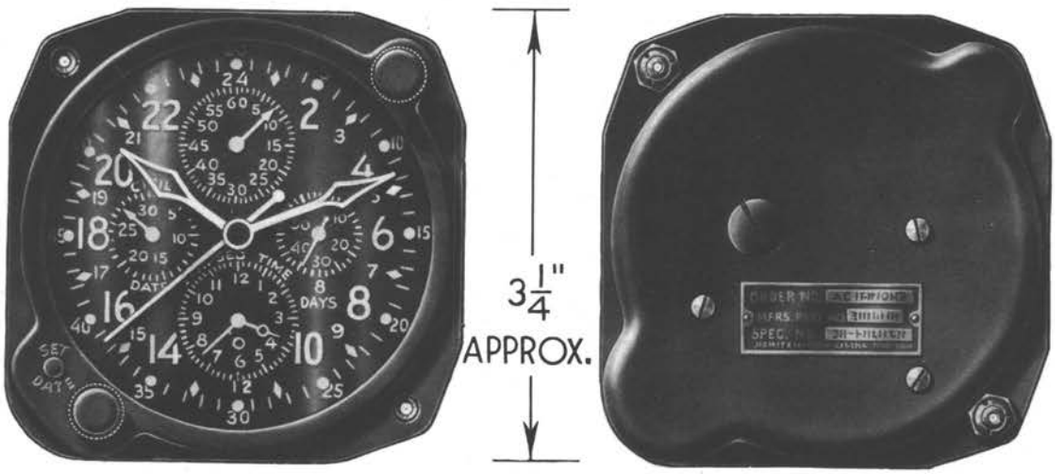
A. E. REFERENCE NUMBER: 60-1150
SPECIFICATIONS:
Detail 94-27961
Superseded 27961
MANUFACTURER: Jaeger Watch Company
MANUFACTURER'S MODEL IDENTIFICATION: 3860
TYPE DESIGNATION: A-10
A. S. C. STOCK NUMBER: 6000052765
TECHNICAL ORDER NUMBER: 05-1-9
PRODUCTION STATUS: Under procurement. Will be superseded by AN5741-1 clock when available. Latter incorporates additional civil date dial.
SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1115



CLOCK—8-DAY ELAPSED TIME CIVIL DATE

AN5741-1 FORMER ARMY TYPE A-10 F. S. S. C. NUMBER 88-C-573

NAMES: 8-day elapsed time civil date clock
Civil date elapsed time clock
Clock—aircraft 8-day elapsed time
Eight day clock
Airplane clock
Navigation clock
Elapsed time clock

DESCRIPTION: This Army-Navy clock, with an 8-day movement, is housed in a vented case and incorporates a chronograph mechanism with hour, minute and second hands. A sweep second hand and stop mechanism is included with a jump-type minute totalizer (up to 60 minutes) to show the total movement of the sweep hand. An elapsed time indicator (hours and minutes up to 12 hours) and a civil date indicator is also provided.

CHARACTERISTICS:

Dial type	24-hour
Dial diameter	2¾ inches
Dimensions	approximately 3¼ by 3¼ by 2¼ inches
Weight	approximately 1.0 pound
Movement	8-day, 15-jewel, stem wind back ratchet and stem set
Lighting	fluorescent markings

ARMY

A. E. REFERENCE NUMBER: 60-1160
SPECIFICATIONS:

Detail	AN-C-62
Superseded	94-27961

AN DRAWING NUMBER: AN5741
AN PART NUMBER: AN5741-1
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

NAVY

SPECIFICATIONS:

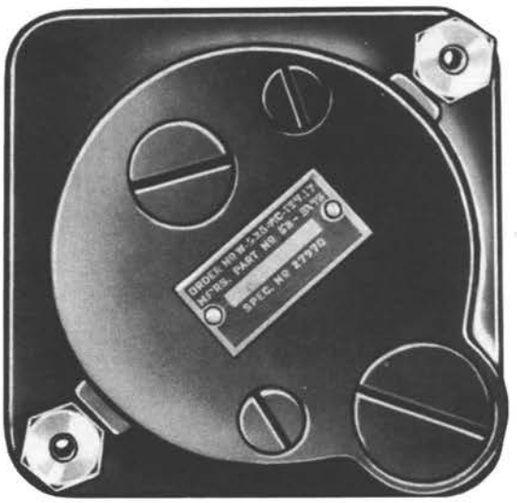
Detail	AN-C-62
Superseded	SQ-116

AN DRAWING NUMBER: AN5741, superseding BuAer drawing 884-SK
AN PART NUMBER: AN5741-1
F. S. S. C. STOCK NUMBER: 88-C-573
TECHNICAL NOTE NUMBER: BuAer Aircraft Instrument Handbook, Chapter 23
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	British Reference Number
Elgin National Watch Co.	1782	N	
Hamilton Watch Co.	37590	N	
Jaeger Watch Co.	3920	N-B	106A/980

INTERCHANGEABILITY NOTE: F. S. S. C. Number 88-C-590 is installationally interchangeable with the above models. The features provided in this model are not the same as those above. Therefore, interchangeability is dependent upon those features deemed necessary for the installation concerned.



CLOCK—7 JEWEL UNLIGHTED

AN5743-1 FORMER ARMY TYPE A-11 F. S. S. C. NUMBER 88-C-583

NAMES: 7 jewel—unlighted clock
Clock, aircraft (1⅞ inch round dial)
Clock—8-day
Clock, type A-11 (aircraft)
Eight-day clock
Airplane clock
Navigation clock

DESCRIPTION: This clock has a square flange and a vented aluminum case. It has an eight-day stem wind movement, with a sweep second hand. The winding knob is at the lower left of the case.

CHARACTERISTICS:

Size	round dial, 1⅞ inches diameter
Weight	approximately ⅗ pound
Movement	8-day, 7-jewel, stem wind; back ratchet and stem set
Lighting	fluorescent luminescent markings
Dial type	12-hour

ARMY

A. E. REFERENCE NUMBER: 60-1200
SPECIFICATIONS:

General	94-27220-C
Detail	AN-C-99
Superseded	94-27970-A

AN DRAWING NUMBER: AN5743
AN PART NUMBER: AN5743-1
TECHNICAL ORDER NUMBER: 05-1-9
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

NAVY

SPECIFICATIONS:

Detail	AN-C-99
Superseded	BuAer Spec. SQ-87

AN DRAWING NUMBER: AN5743
F. S. S. C. NUMBER: 88-C-583
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

(*Continued on Page 259*)

CLOCK—7 JEWEL UNLIGHTED

(Continued from Page 258)

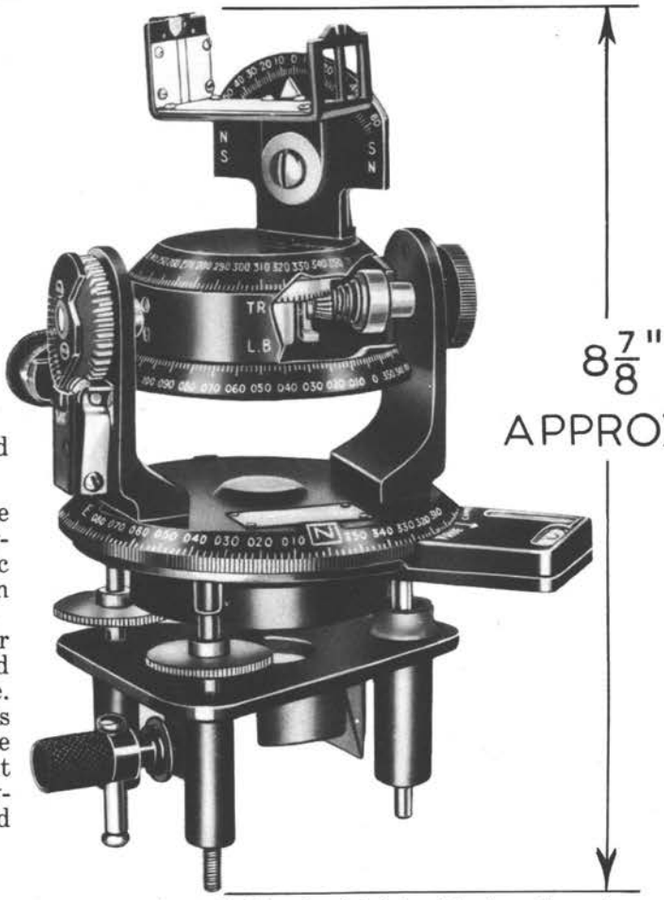
ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Bulova Watch Co.	21AE	21AE	A-B			106A/529	
Elgin National Watch Co.	1776	1776	A-B	6000052800	05-1-9	106A/529	
Waltham Watch Co.	22809-S-12	22809-S-12	A-B-N			106A/529	22 size, 9 jewel.
Longines-Wittnauer Watch Co., Inc.	63-EAFF	63-EAFF	A-B	6000052830	05-1-9	106A/529	
	19-41	19-41	A-B	6000052890			
Pioneer Instrument Division	3310	3310-A	C				
	3311	3311-A	C				Has elapsed time hand.
	3315-2B	3315-A	A-B	6000048835		106A/529	7-jewel, 8-day movement, bottom winding and setting knob.
	3310	3310-2A-A	B-C			106A/20	7-jewel, 8-day movement, bottom winding and setting knob.
	3310	3310-2B-A	C				Bottom winding and setting knob; 7-jewel.
	3311	3311-2A-A	B-C			106A/144	
Kollsman Instrument Division	505-01	505-01	B-C	6000048915		106A/529	Luminous and fluorescent dial.
	505K-01	505K-01	B-C			106A/324	Luminous dial, split case.

INTERCHANGEABILITY NOTE: Army type A-9 (A. E. Reference Number 60-1100) is installationally interchangeable with the above models. It differs in that it has an individually lighted case. Therefore, it is to be considered interchangeable if the lighting feature is adaptable.

COMPASS—ASTRO

ARMY TYPE A-1 NAVY MARK 2
BRITISH MARK II



NAMES: Astro compass
Compass astro A-1
Compass astro for use with 05A standard (Navy)

DESCRIPTION: This instrument is used to provide the navigator with a true heading of the aircraft, and to swing and correct the magnetic compass reading during flight. It is mounted on a base described on page 261.

The instrument contains scales for setting latitude, longitude and data obtained from an almanac based on the time and date. When this data is set in, the instrument is rotated until a chosen star is sighted. The true bearing of the airplane is read on a resultant scale. A transit case, made of plastic and plywood, including a shoulder strap, is furnished for carrying the compass.

CHARACTERISTICS:
Dimensions.....approximately 9 inches high by 5 inches diameter
Weight.....approximately 1¾ pounds

ARMY

A. E. REFERENCE NUMBER: 60-1225
SPECIFICATIONS:
General.....AN-C-92
AN DRAWING NUMBER: AN5738
AN PART NUMBER: AN5738-1
TYPE DESIGNATION: A-1
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.
Carton dimensions.....approximately 12⅛ by 7⅞ by 9 inches
Gross weight.....approximately 6¼ pounds

NAVY

TYPE DESIGNATION: Mark 2
SPECIFICATIONS:
General.....AN-C-92
AN DRAWING NUMBER: AN5738
AN PART NUMBER: AN5738-1
F. S. S. C. NUMBER: 88-C-770
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Sperti, Inc.	D-500	A-N-B	6200025785	05-15-10	106A/1088
The W. W. Boes Co.	94	A-N-B	6200025775	05-15-10	106A/1088

NOTE: The British stores reference number for this item is 6A/1174.

STANDARD—ASTRO COMPASS

ARMY TYPE O-5 NAVY TYPE O5A

NAMES: Astro compass standard
Standard—compass—astro
Standard for use with Mark II astro compass
Standard for compass—astro A-1
Base assembly—astro compass standard

DESCRIPTION: This standard, or base, is a mount for the astro compass. The base is permanently installed in the airplane in such a position as to properly align the astro compass with the airplane axis. The design permits removal of the astro compass when not in use.

CHARACTERISTICS:

Height	approximately 2⅜ inches
Outside diameter of cylinder	approximately 2¼ inches
Diameter at base	approximately 3¼ inches
Weight	approximately 4¼ ounces

ARMY

A. E. REFERENCE NUMBER: 60-1226
SPECIFICATIONS:
General . . . . . None
AN DRAWING NUMBER: AN5738
AN PART NUMBER: AN5738-2
TYPE DESIGNATION: O-5
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

Dimensions of carton	approximately 3½ by 3⅜ by 3 inches
Gross weight	approximately 5½ ounces

NAVY

TYPE DESIGNATION: O5A
AN DRAWING NUMBER: AN-5738
F. S. S. C. NUMBER: 88-S-1310
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
The W. W. Boes Co.	102	A-N-B	6200026425	05-15-10	106A/1017
Sperti, Inc.	D-102	A-N-B	6200026435	05-15-10	106A/1017
Scott Aviation Corp.	1276	A-N-B	6200026445	05-15-10	106A/1017

NOTE: British (United Kingdom Assigned) reference number is 6A/3660.

DIRECT READING MAGNETIC COMPASSES

The compass is used to determine the direction of the airplane with reference to the earth's magnetic field.

Airplane compasses are divided into two general classes; pilot's compasses, which are installed in or above the instrument panel for use by the pilot, and navigator's compasses, which are installed on a table or on the floor for use by the navigator.

Compass readings should be taken while the airplane is flying straight and level at a constant speed. The variation which exists between magnetic North and true North cannot be reduced or eliminated, but is constant for all headings in the same locality, and may be allowed for. Deviation error, due to magnetic influences in the airplane, may be eliminated or reduced. This error varies with different headings in the same locality.

Pilot's compasses are direct reading magnetic type compasses. They consist of a fluid-filled bowl which contains a pivoted float bearing magnetized needles. The float is suspended so that the needles are free to align themselves horizontally with the earth's magnetic field. One end of a magnetic needle, called the North-seeking end, always points toward magnetic North when freely suspended.

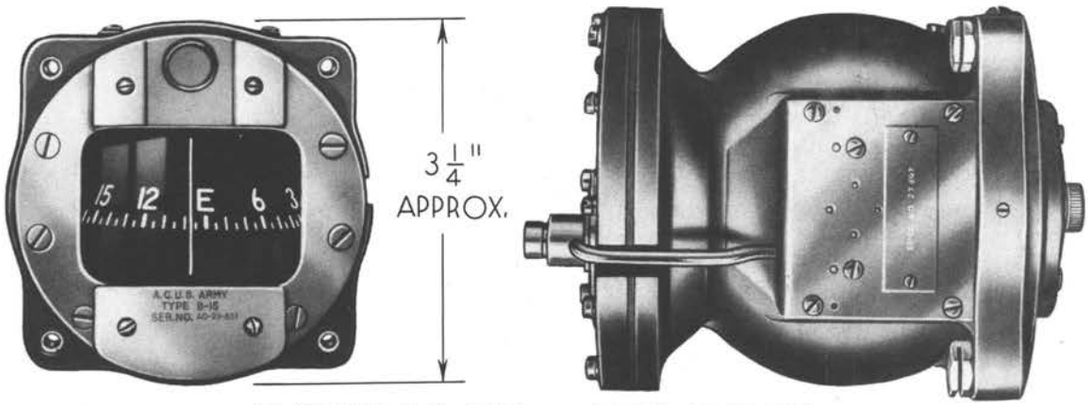
In such compasses, the position of a graduated card attached to the float is visible through a glass cover in the front of the bowl. The bowl is filled with compass fluid to dampen the movement of the card, which is marked with the cardinal headings (North, East, South and West). In steady flight, the needles point continuously toward magnetic North. A box, containing magnets which compensate for deviation, is located on top of the compass.

The lubber's line, a piece of thin metal placed vertically in the center of the glass cover or window, intersects the card, to show the direction in which the airplane is pointing.

The navigators' direct reading compass is known as an aperiodic (without a period) compass, since the needle returns to rest quickly and without appreciable overswing when deflected from its position. Radial arms or vanes attached to the card dampen the swing of the needle.

This type of compass is mounted horizontally, and is read through a glass cover on the top. The compass consists primarily of a cylindrical metal bowl filled with compass fluid. In the center of the bowl is a semi-float type card to which are attached the magnetized needles and the radial arms. The card is marked with the four cardinal points, with an arrow indicating North. Inside the bowl, a fixed mark acts as the lubber's line. A graduated rotatable ring, (verge) with two clamping screws, is fastened to the upper edge of the compass bowl. Across the inside of the ring are two horizontal, parallel white wires, spaced equally on either side of the N and S markings. In making readings, the ring is turned until the two white wires are parallel to the North-South lines on the card. The airplane heading is read as the marking on the ring which is directly above the lubber's line.

A box containing magnets which may be turned to compensate for deviation is located on the bottom of the compass.



COMPASS—PILOT'S

AN5733-1 FORMER ARMY TYPE B-16 F. S. S. C. NUMBER 88-C-783

NAMES: Pilot's compass
Compass—vertical dial
Pilot's card type magnetic compass
Compass—pilot's card type
Magnetic fluorescent compass—vertical dia

A description which embodies its constructional features and operating characteristics will be found in paragraphs 3, 4 and 5 of the general description of Direct Reading Magnetic Compasses on page 262.

DESCRIPTION: The Army-Navy magnetic compass, AN5733-1, may be mounted either on the pilot's instrument panel or on a bracket in the cockpit.

CHARACTERISTICS:

Dimensions	approximately 3¼ by 3¼ by 4½ inches
Weight	approximately 1½ pounds
Dial size	approximately 2 by 1 7/16 inches
Illumination	individual; two wire, 3 volt lamp
Markings: Principal	fluorescent radioactive material
Minor	fluorescent material

ARMY

A. E. REFERENCE NUMBER: 60-1250
SPECIFICATIONS:

Detail	AN-C-79
Superseded	94-27807

AN DRAWING NUMBER: AN5733
AN PART NUMBER: AN5733-1
TYPE DESIGNATION: Former Army B-16
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

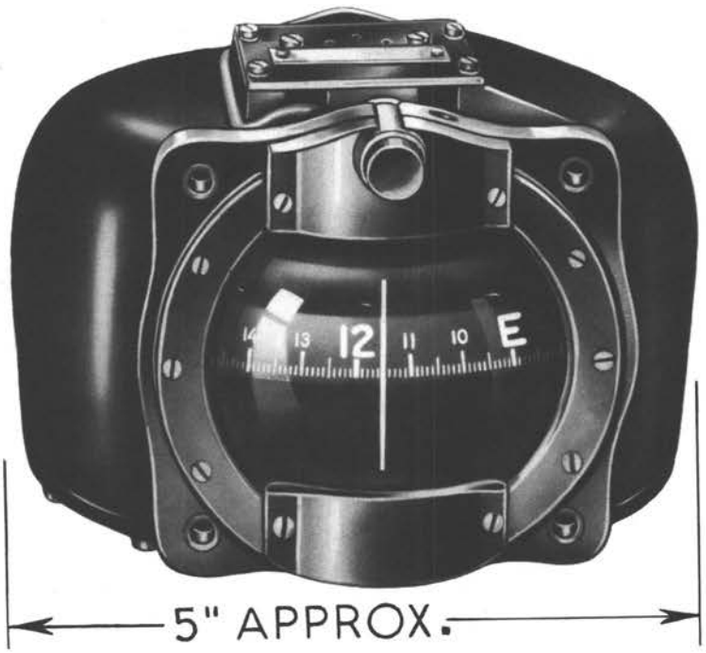
Dimensions of carton	approximately 6 by 6 by 6 inches
Gross weight	approximately 1½ pounds

NAVY

SPECIFICATIONS: Detail AN-C-79
AN PART NUMBER: AN5733-1
F. S. S. C. NUMBER: 88-C-783
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Airpath Instrument Corp.	CB-1000	A-B	6000067455	05-15-2	106A/34	Now designated AN5733-1
	CBO-1000	A-B	6000067460	05-15-2	106A/34	
	CBU-1000	A-B	6000067465	05-15-2	106A/34	
	C-1000	B-C			106A/34	
	CU-1000	B-C			106A/34	
	CO-1000	B-C			106A/34	
Kollsman Instrument Division	758	A-N-B	6000067450	05-15-9	106A/34	May be mounted front or back.
Pioneer Instrument Division	1803A-1	A-N-B	6000067750	05-15-2	106A/34	
	1803-1-A	A-N-B	6000067475	05-15-2	106A/34	
	1803-1-B	A-N-B	6000067500	05-15-2	106A/34	
	1818-1-A	A-N-B	6000068000	05-15-2	106A/34	
	1803A-2	B-C	6000067800		106A/34	
	1818-3-A	B-C	6000055450		106A/34	



COMPASS—PILOT'S

ARMY TYPE B-17

NAMES: Pilot's compass Compass—vertical dial

DESCRIPTION: A description of the constructional features and operating characteristics of the Army type B-17 pilot's compass will be found in paragraphs 3, 4 and 5, page 262. It is mounted on the pilot's instrument panel.

CHARACTERISTICS:

Dimensions	approximately 5¼ by 5¼ by 6 inches
Weight	approximately 3 pounds
Dial size	approximately 2½ by 1⅞ inches
Illumination	individual: one wire, 3-volt lamp
Markings:	
Principal	radioactive material
Minor	white paint

ARMY

A. E. REFERENCE NUMBER: 60-1300

SPECIFICATIONS:

General	94-27180
Detail	94-27815

TYPE DESIGNATION: B-17

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Not under procurement for initial installation.

SHIPPING DATA: Shipped as a complete unit.

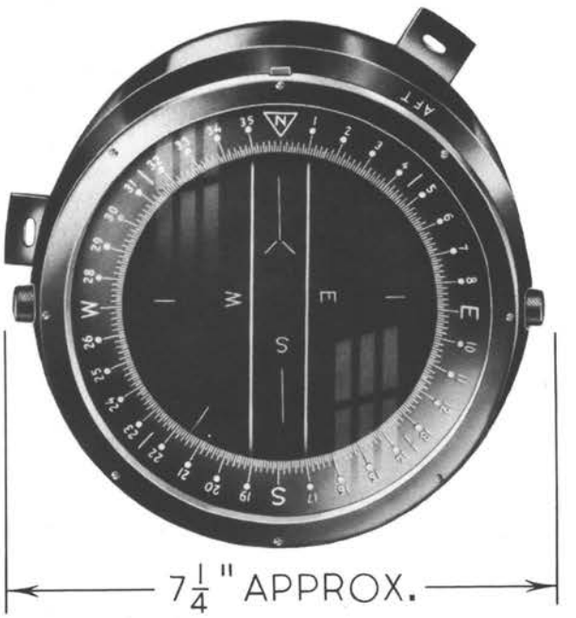
Dimensions of carton	approximately 6 by 6 by 6 inches
Gross weight	approximately 4 pounds

NAVY

There is no Navy equivalent for this item.

MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Pioneer Instrument Division	1813	1813-1-A	A	6000068750	05-15-2	106A/414
	1813	1813-1-B	A	6000069000	05-15-2	106A/414
	1813	1813-2-B	A-C	6000069025		106A/414
	1815	1815-2-A	C			106A/414



COMPASS—NAVIGATOR'S

ARMY TYPE D-12 F. S. S. C. NUMBER 88-C-845

NAMES: Navigator's compass
Compass assembly—navigation
Compass—top reading
Compass, navigation (aircraft) long-period

DESCRIPTION: The Army type D-12 navigator's compass is aperiodic, and indicates magnetic north with no appreciable overswing. A more complete description is given on page 262. It may be mounted on a table or on the floor.

CHARACTERISTICS:
Dimensions . . . . . approximately 4⅜ inches high by 7 inches diameter
Weight . . . . . approximately 6½ pounds
Dial size . . . . . 5¾ inches diameter
Illumination . . . . . none
Markings:
Principal . . . . . radioactive material
Minor . . . . . white paint

ARMY

A. E. REFERENCE NUMBER: 60-1400
SPECIFICATIONS:
General 94-27180
Detail 94-27825
A. A. F. DRAWING NUMBER: 34B2148 (compensator assembly)
TYPE DESIGNATION: D-12
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.
Dimensions of carton . . . . . approximately 12 by 12 by 9 inches
Gross weight . . . . . approximately 9 pounds

NAVY

BUREAU OF AERONAUTICS DRAWING NUMBER: 898-SK
F. S. S. C. STOCK NUMBER: 88-C-845
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Pioneer Instrument Division	1801	1801-1A	A-N-B	6000059250	05-15-2	106A/428	
	1801A	1801A-1	A-B	6000059500	05-15-2	106A/428	
	1832	1832-1-A	A-B	6000059550	05-15-2	106A/428	
	1832	1832-3-A	N-B			106A/428	
	1826	1826-1-A	N-B			106A/428	
	1801	1801-2A	B-C			106A/428	
	1826	1826-2-A	B-C			106A/428	
	1802A	1802A-1	A-C	6000060000			Army type D-13. 4½ inch diameter.
	1802	1802-1-A	A-B-C			106A/32	Army type D-13. 4½ inch diameter.
	1802	1802-2-A	B-C			106A/32	4½ inch diameter.
	1802	1802-2-B	B-C			106A/32	4½ inch diameter.
Victor Adding Machine Co.	1801	1801-1-A-VA	A-B	6000059275	05-15-2	106A/428	

GYRO FLUX GATE COMPASS SYSTEM

The gyro flux gate compass is a remote indicating instrument designed to supply an accurate and continuous directional reading which is not affected by turns, banks, climbs, dives, yawing or bumpy weather.

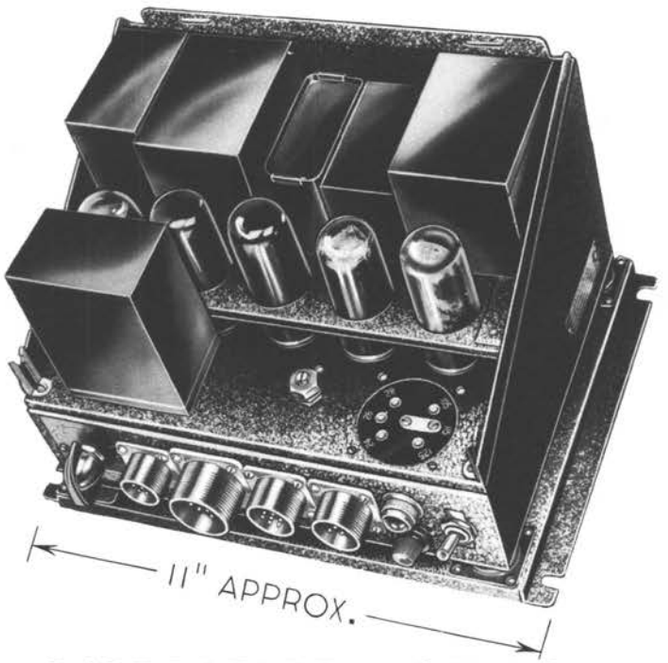
The transmitter, which contains the flux gate, is mounted in that part of the airplane which contains the least metallic equipment, in order to reduce magnetic disturbances and compass deviation caused by the engines, guns, turrets and other metallic equipment of the airplane. The flux gate, the sensitive element in the compass, is a coil which picks up the signal from the earth's magnetic field and transmits it to an indicator. The flux gate is stabilized by a vertically spinning electrical gyro, to maintain a fixed position in relation to the earth's surface regardless of the airplane's position.

The signal picked up by the flux gate is continuously transmitted by an autosyn motor to a master indicator capable of re-transmitting the signal to other indicators where the compass reading is duplicated, in as many as six stations in the aircraft. These are referred to as repeater indicators. An amplifier containing radio tubes strengthens the electrical signal at the master indicator, to make possible its transmission to the repeater indicators.

Provision has been made for caging the gyro to prevent damage when the power is off, or when the airplane engages in maneuvers in which deviations from the flight position exceed 65 degrees. Caging the gyro may be done by a manual control mounted beneath the gyro and connected to it by a flexible shaft, or by an electrical control remotely located in a switch box.

Compensation for the magnetic variations found on the earth's surface are made by adjusting a knob which rotates the outer dial of the master indicator. Repeater indicators display the corrected readings.

Detailed information concerning the component parts of the compass listed below will appear on the following pages:



AMPLIFIER—GYRO FLUX GATE COMPASS

AN5753-1 F. S. S. C. NUMBER 88-A-500

NAMES: Gyro flux gate compass amplifier
Amplifier—unit gyro flux gate compass
Amplifier—compass—gyro flux gate (Navy)
Compass—gyro flux gate—amplifier unit

DESCRIPTION: This is a component part of the gyro flux gate compass, described in detail on page 266. It amplifies the signal transmitted from the master indicator to the repeater indicators.

CHARACTERISTICS:

Location	near navigator
Weight	approximately 12½ pounds
Dimensions	approximately 11 by 9⅜ by 7 inches
Electrical plugs	AN3106-16S-1S to transmitter AN3106-20-1S to master indicator AN3106-14S-2S to repeater indicator AN3106-16S-4S to 400 cycle supply source

ARMY

A. E. REFERENCE NUMBER: 60-1351
SPECIFICATIONS:

General	AN-GG-C-555
Detail	AN-A-6

AN DRAWING NUMBER: AN5753
AN PART NUMBER: AN5753-1
MANUFACTURER'S DESIGNATION: Pioneer Inst. Part Number 12003-1-A
A. S. C. STOCK NUMBER: 6000024500
TECHNICAL ORDER NUMBER: 05-15-7
PRODUCTION STATUS: Under procurement.
SHIPPING DATA:

Dimensions of carton	approximately 12¼ by 10¼ by 9½ inches
Gross weight	approximately 14¾ pounds

NAVY

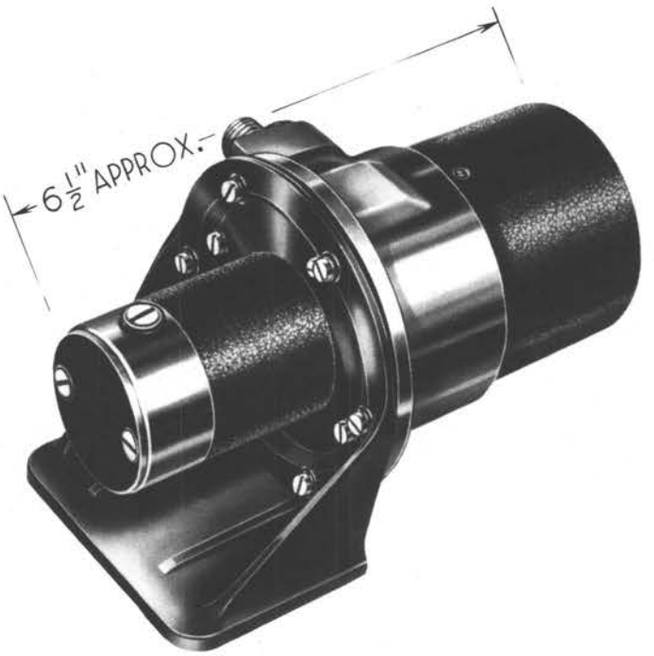
SPECIFICATIONS:

General	AN-GG-C-555
Detail	AN-A-6
Superseded	SE-30

AN DRAWING NUMBER: AN5753
AN PART NUMBER: AN5753-1
F. S. S. C. NUMBER: 88-A-500
TECHNICAL NOTE NUMBER: Pioneer Manual.
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1248



CONTROL—GYRO FLUX GATE COMPASS ELECTRICAL CAGING

AN5754-1 F. S. S. C. NUMBER 88-C-1355

NAMES: Gyro flux gate compass electrical caging control
Control—gyro flux gate compass
Control—caging—compass gyro flux gate—motor driven (Navy)
Drive—remote electrically operated caging
Compass—gyro flux gate—electrical caging control
Caging control—gyro flux gate compass—electrical

DESCRIPTION: This is a component part of the gyro flux gate compass. It is used to cage the gyro to protect it from damage during periods when the power is off or when the aircraft is engaged in violent maneuvers.

CHARACTERISTICS:

Method of mounting	vertical, five feet from transmitter with three inch clearance for air
Weight	approximately 2 pounds
Dimensions	approximately 3½ by 6½ inches
Electrical plug	AN3102-14S-2P

ARMY

A. E. REFERENCE NUMBER: 60-1352
SPECIFICATIONS:

General	AN-GG-C-555
Detail	AN-D-4

AN DRAWING NUMBER: AN5754
AN PART NUMBER: AN5754-1
MANUFACTURER'S DESIGNATION: Pioneer Inst. Part Number CM-2
A. S. C. STOCK NUMBER: 6000096675
TECHNICAL ORDER NUMBER: 05-15-7
PRODUCTION STATUS: Under procurement.
SHIPPING DATA:

Dimensions of carton	approximately 8 by 5¾ by 4½ inches
Gross weight	approximately 2½ pounds

NAVY

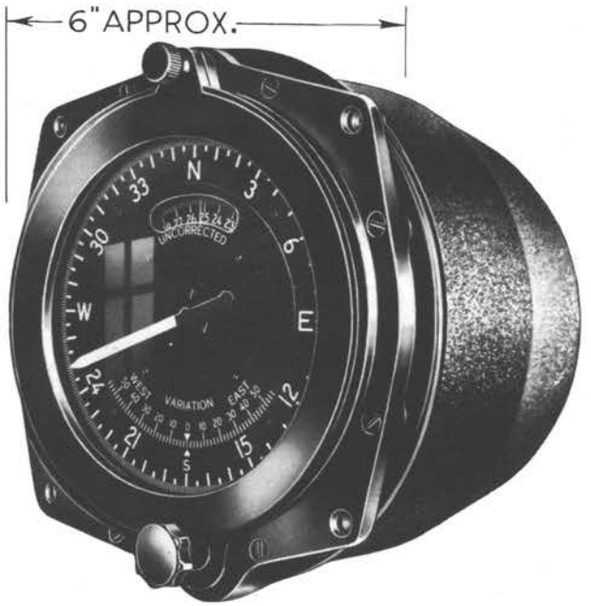
SPECIFICATIONS:

General	AN-GG-C-555
Detail	AN-D-4

AN DRAWING NUMBER: AN5754
AN PART NUMBER: AN5754-1
F. S. S. C. NUMBER: 88-C-1355
TECHNICAL NOTE NUMBER: Pioneer Manual
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1251



INDICATOR—GYRO FLUX GATE COMPASS MASTER

AN5752-1 F. S. S. C. NUMBER 88-I-1670

NAMES: Gyro flux gate compass master indicator
Indicator—master compass—gyro flux gate (Navy)
Indicator assembly—master gyro flux gate compass
Compass—gyro flux gate—master indicator

DESCRIPTION: This is a component part of the flux gate gyro compass. It indicates the compass direction received from a remotely located transmitter, and re-transmits this indication to repeater indicators in various stations throughout the aircraft.

CHARACTERISTICS:

Method of mounting	horizontal or vertical
Weight	approximately 6½ ounces
Dial size	approximately 4 inches
Depth	approximately 7 inches
Electrical plugs	AN3106-20-1S
Markings	Major—radioactive material Minor—phosphorescent material

ARMY

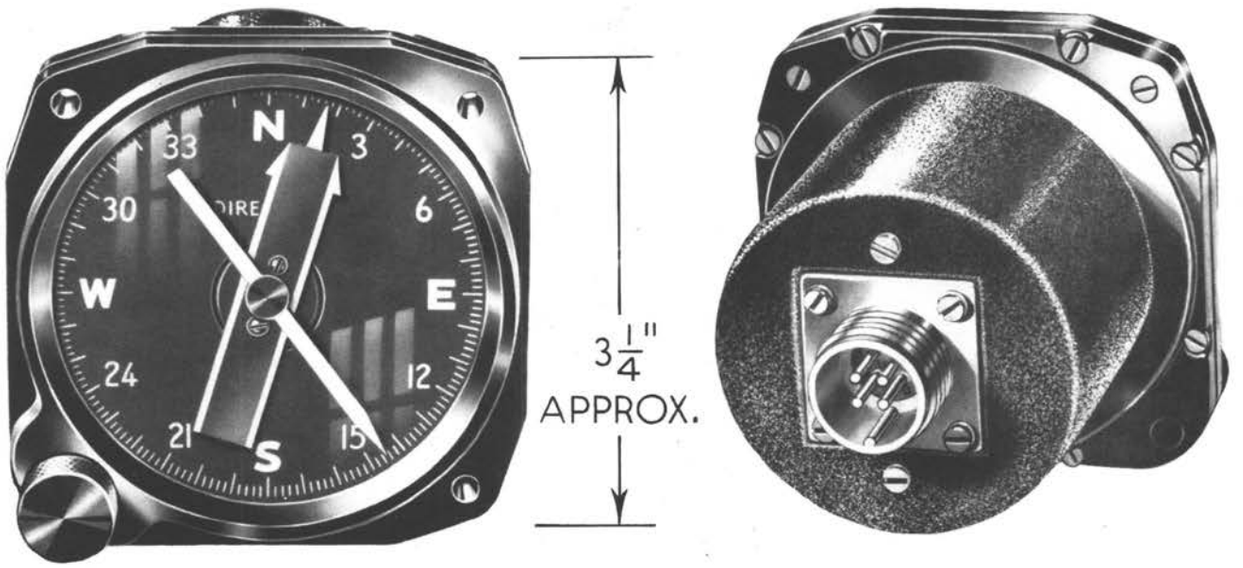
A. E. REFERENCE NUMBER: 60-1353
SPECIFICATIONS:
General.....AN-GG-C-555
Detail.....AN-I-7
AN DRAWING NUMBER: AN5752
AN PART NUMBER: AN5752-1
MANUFACTURER'S TYPE DESIGNATION: Pioneer Instrument Part Number 12001-1A-A-1
A. S. C. STOCK NUMBER: 6000224500
TECHNICAL ORDER NUMBER: 05-15-7
PRODUCTION STATUS: Under procurement.
SHIPPING DATA:
Dimensions of carton...approximately 9 by 9 by 10 inches
Gross weight.....approximately 7½ pounds

NAVY

SPECIFICATIONS:
General.....AN-GG-C-555
Detail.....AN-I-7
AN DRAWING NUMBER: AN5752
AN PART NUMBER: AN5752-1
F. S. S. C. STOCK NUMBER: 88-I-1670
TECHNICAL NOTE NUMBER: Pioneer Manual
PROCUREMENT STATUS: Standard.
G. F. E.—Order through A. S. O. by F. S. S. C. number.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1246



INDICATOR—REMOTE INDICATING MAGNETIC COMPASS

AN5730-6 F. S. S. C. NUMBER 88-I-801

NAMES: Remote indicating magnetic compass indicator
Compass—indicator—remote magnetic
Indicator assembly—remote indicating compass—magnetic
Indicator—compass remote indicating—magnetic (Navy)
Gyro flux gate compass repeater indicator
Indicator—repeater compass—gyro flux gate
Indicator assembly—repeater—gyro flux gate compass
Compass—gyro flux gate—repeater indicator
Indicator—compass remote indicating—magnetic (Navy)

DESCRIPTION: This indicator can be used with either the Remote Indicating Magnetic Compass, or with the Gyro Flux Gate Compass as a secondary indicator. The indicator records the compass direction, which is transmitted electrically from a remotely located transmitter. This instrument was designed primarily for installation on Night Fighters.

CHARACTERISTICS:

Dimensions	approximately 3¼ by 3¼ by 3¼ inches
Weight	approximately 1½ pounds
Dial size	2¾ inches diameter
Electrical connector	AN3106-14S-2S
Markings	Fluorescent marking only

INTERCHANGEABILITY NOTE: A. E. Reference Number 60-1451 may not be used in lieu of this instrument because it has radioactive dial markings; however, A. E. Reference Number 60-1454 may be used to replace the former in case of emergency.

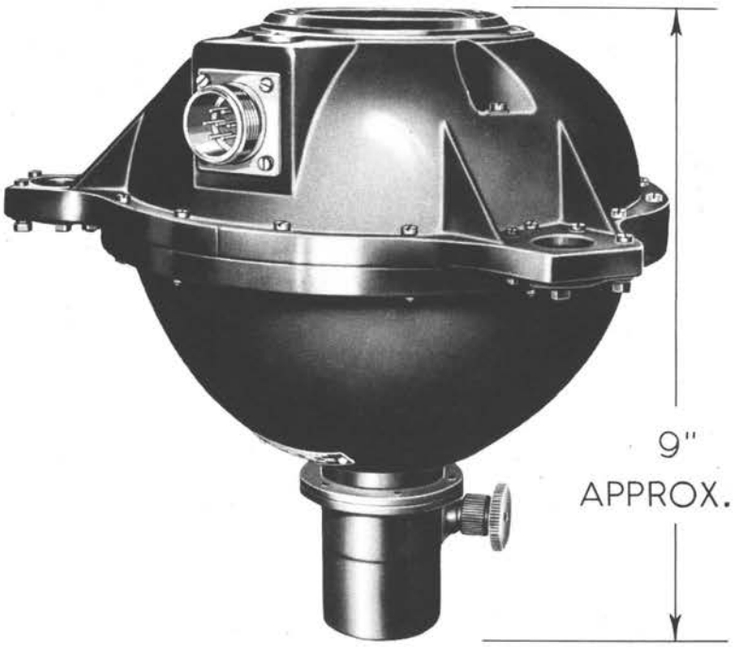
ARMY

A. E. REFERENCE NUMBER: 60-1454
SPECIFICATIONS:
General.....AN-GG-C-555; AN-GG-C-566a
Superseded.....27996
AN DRAWING NUMBER: AN5730
AN PART NUMBER: AN5730-6
TECHNICAL ORDER NUMBER: 05-15-5
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

NAVY

SPECIFICATIONS:
General.....AN-GG-C-566a; AN-GG-C-555
Superseded.....Navy Aeronautical C-108
AN DRAWING NUMBER: AN5730
AN PART NUMBER: AN5730-6
F. S. S. C. NUMBER: 88-I-801
TECHNICAL NOTE NUMBER: Pioneer Overhaul Manual
PROCUREMENT STATUS: Standard.
G. F. E.—Order through A. S. O. by F. S. S. C. number.

MANUFACTURER: Pioneer Instrument Division of Bendix Aviation Corporation. Part Number 10061-1L-B1



TRANSMITTER—GYRO FLUX GATE COMPASS

AN5751-1 F. S. S. C. NUMBER 88-T-1900

NAMES: Gyro flux gate compass transmitter
Compass—gyro flux gate transmitter
Transmitter—compass—gyro flux gate (Navy)

DESCRIPTION: This is a component part of the gyro flux gate compass. The transmitter contains the gyroscopically stabilized flux gate, which is sensitive to the earth's magnetic field. It transmits the signal by autosyn motor to a remotely located master indicator.

CHARACTERISTICS:

Location	wing or tail
Weight	approximately 7½ pounds
Depth	approximately 9 inches
Diameter	approximately 8⅜ inches

ARMY

A. E. REFERENCE NUMBER: 60-1355
SPECIFICATIONS:

General	AN-GG-C-555
Detail	AN-T-24

AN DRAWING NUMBER: AN5751
AN PART NUMBER: AN5751-1
MANUFACTURER'S DESIGNATION: Pioneer Instrument Part Number 12002-1-A
A. S. C. STOCK NUMBER: 6000424000
TECHNICAL ORDER NUMBER: 05-15-7
PRODUCTION STATUS: Under procurement.
SHIPPING DATA:

Dimensions of carton	approximately 13 by 13 by 12 inches
Gross weight	approximately 11½ pounds

NAVY

SPECIFICATIONS:

General	AN-GG-C-555
Detail	AN-T-24
Superseded	SE-30

AN DRAWING NUMBER: AN5751
AN PART NUMBER: AN5751-1
F. S. S. C. NUMBER: 88-T-1900
TECHNICAL NOTE NUMBER: Pioneer Manual
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1247

SWITCH BOX—GYRO FLUX GATE COMPASS

AN5756-1 F. S. S. C. NUMBER 88-S-1380

NAMES: Gyro flux gate compass switch box
Compass—gyro flux gate—switch box
Box—gyro flux gate switch
Switch—caging control—remote compass gyro flux gate (Navy)

DESCRIPTION: This is a component part of the gyro flux gate compass. The switch box contains the remote electrical control for caging the gyro when power is shut off or when the aircraft is engaged in violent maneuvers.

CHARACTERISTICS:
Method of mounting.....vertical, and visible to navigator
Weight.....approximately ½ pound
Dimensions.....approximately 4⅞ by 3¼ by 3 inches
Electrical plug.....AN3102-14S-2P

ARMY

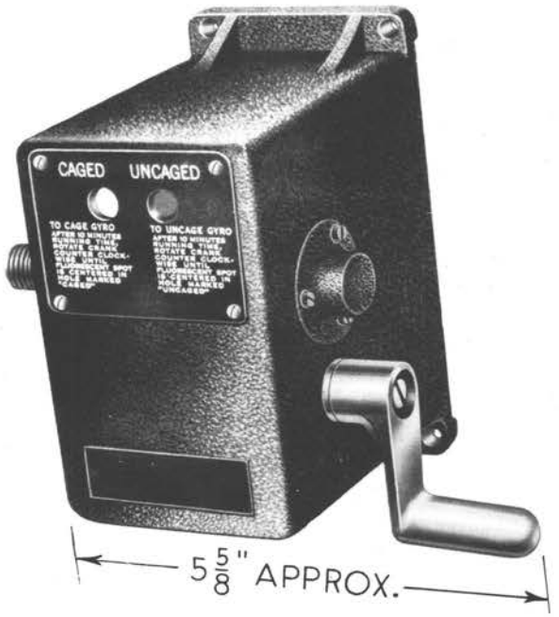
A. E. REFERENCE NUMBER: 60-1356
SPECIFICATIONS:
General.....AN-GG-C-555
Detail.....AN-B-8
AN DRAWING NUMBER: AN5756
AN PART NUMBER: AN5756-1
MANUFACTURER'S DESIGNATION: Pioneer Instrument part number CQ-1
A. S. C. STOCK NUMBER: 6000349725
TECHNICAL ORDER NUMBER: 05-15-7
PRODUCTION STATUS: Under procurement.
SHIPPING DATA:
Dimensions of carton.....approximately 5¼ by 3¾ by 3¾ inches
Gross weight.....approximately 1⅛ pounds

NAVY

SPECIFICATIONS:
General.....AN-GG-C-555
Detail.....AN-B-8
AN DRAWING NUMBER: AN5756-1
AN PART NUMBER: AN5756-1
F. S. S. C. NUMBER: 88-S-1380
TECHNICAL NOTE NUMBER: Pioneer Manual
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1253



CONTROL—GYRO FLUX GATE MANUAL CAGING

AN5755-1 F. S. S. C. NUMBER 88-C-1350

NAMES: Gyro flux gate manual caging control
Control—gyro flux gate compass
Control—caging—compass gyro flux gate—manual (Navy)
Compass—gyro flux gate—manual caging control
Caging control—gyro flux gate compass—manual
Drive—remote manual operated caging

DESCRIPTION: This is a component part of the gyro flux gate compass. It is used to manually cage or uncage the gyro.

CHARACTERISTICS:
Method of mounting.....vertical
Weight.....approximately 1⅛ pounds
Dimensions.....approximately 5⅝ by 5⅜ by 4¼ inches

ARMY

A. E. REFERENCE NUMBER: 60-1357
SPECIFICATIONS:
General.....AN-GG-C-555
Detail.....AN-D-5
AN DRAWING NUMBER: AN5755
AN PART NUMBER: AN5755-1
MANUFACTURER'S DESIGNATION: Pioneer Instrument part number CM-1
A. S. C. STOCK NUMBER: 6000096660
TECHNICAL ORDER NUMBER: 05-15-7
PRODUCTION STATUS: Under procurement.
SHIPPING DATA:
Dimensions of carton.....approximately 7 by 6 by 4½ inches
Gross weight.....approximately 1½ pounds

NAVY

SPECIFICATIONS:
General.....AN-GG-C-555
Detail.....AN-D-5
AN DRAWING NUMBER: AN5755
AN PART NUMBER: AN5755-1
F. S. S. C. NUMBER: 88-C-1350
TECHNICAL NOTE NUMBER: Pioneer Manual
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

BRITISH

BRITISH REFERENCE NUMBER: 106A/1252

REMOTE INDICATING MAGNETIC COMPASS

When a compass installation free from magnetic deviation is required, the remote indicating magnetic compass may be used. It consists of:

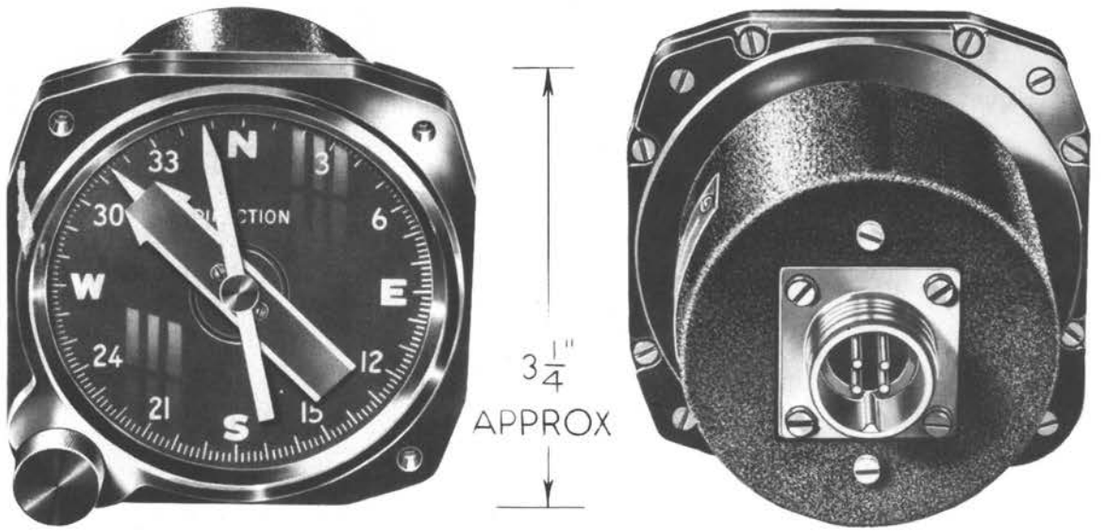
a. Transmitter	AN5730-3
b. Indicator	AN5730-2A or AN5730-6
c. Inverter	Pioneer Part No. 12117-6-A

The transmitter containing the compass magnet and float can be operated in any part of the aircraft where local magnetic disturbances caused by engines, guns, turrets, ammunition, etc., are at a minimum. The reading is electrically transmitted to the indicators, which are mounted in a location convenient for reference. Indicators are not affected by local magnetic disturbances, and from one to three indicators may be operated from one transmitter.

The remote indicating magnetic compass system can operate on any combination of frequency and voltage where the frequency is 13 to 17 times the voltage, i.e., 400 cycles, 26 volts; or 800 cycles, 52 volts. An inverter is used for changing direct current from storage batteries to alternating current for operation of the system. In most cases, the same inverter which operates other electrical systems in the airplane may also be used for the compass.

The indicator face is usually installed in an upright position, and a pointer moves across it showing the direction of flight. A knob for setting a manually-controlled indicating pointer to the desired course is located in the lower left-hand corner of the instrument. When the settings of this pointer and those of the compass pointer coincide, the airplane is headed in the desired direction.

Detailed information concerning the transmitter, indicator and inverter which make up this compass is given in the three pages which follow.



INDICATOR—REMOTE INDICATING MAGNETIC COMPASS

AN5730-2A F. S. S. C. NUMBER 88-I-800

NAMES: Remote indicating magnetic compass indicator
Compass—indicator—remote magnetic
Indicator assembly—remote indicating compass—magnetic
Indicator—compass remote indicating—magnetic (Navy)
Gyro flux gate compass repeater indicator
Indicator—repeater compass—gyro flux gate
Indicator assembly—repeater—gyro flux gate compass
Compass—gyro flux gate—repeater indicator
Indicator—compass remote indicating—magnetic (Navy)

DESCRIPTION: This indicator can be used with either the Remote Indicating Magnetic Compass or as a secondary indicator with the Gyro Flux Gate Compass. The indicator records the compass direction, which is transmitted electrically from a remotely located transmitter.

CHARACTERISTICS:

Dimensions	approximately 3¼ by 3¼ by 3¼ inches
Weight	approximately 1½ pounds
Dial size	2¾ inches diameter
Electrical connector	AN3106-14S-2S
Markings	Major, radioactive material Minor, fluorescent material

ARMY

A. E. REFERENCE NUMBER: 60-1451. Former A. E. Reference Number 60-1354
SPECIFICATIONS:
General.....AN-GG-C-555; AN-GG-C-566a
Superseded.....27996
AN DRAWING NUMBER: AN5730
AN PART NUMBER: AN5730-2A
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

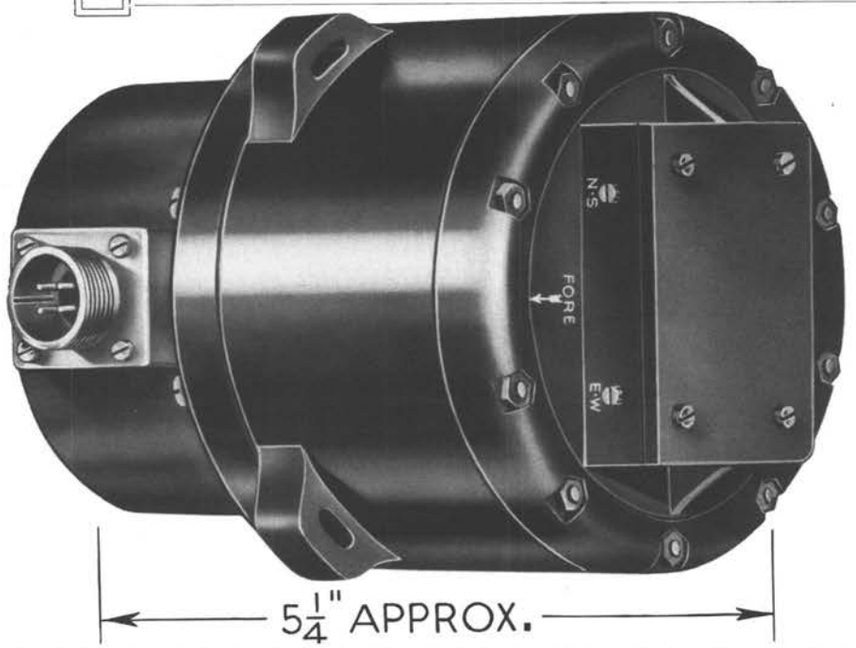
NAVY

SPECIFICATIONS:
General.....AN-GG-C-566a; AN-GG-C-555
Superseded.....Navy Aeronautical C-108
AN DRAWING NUMBER: AN5730
AN PART NUMBER: AN5730-2A
F. S. S. C. NUMBER: Refer to chart.
TECHNICAL NOTE NUMBER: Pioneer Overhaul Manual
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Dial Markings	Used By	AN Part Number	Air Service Command Stock Number	Army Technical Order Number	F. S. S. C. Number	British Reference Number
Pioneer Instrument Division	10061-1A-A1	Luminous & fluorescent	A-N-B	AN5730-2A	6000232190	05-15-5	88-I-800	106A/1250
	10061-1E-A1	Luminous & fluorescent	A-N-B	AN5730-2A	6000232195	05-15-5	88-I-800	106A/1250
	10061-1H-A1	Luminous & fluorescent	A-N-B	AN5730-2A	6000232220	05-15-5	88-I-800	106A/1250
	10061-1E-B1	Luminous & fluorescent	N-B	AN5730-2A			88-I-800	106A/1250
	10061-1D-A1	Luminous & fluorescent	B-C					106A/1250
	10061-1A-A2	Luminous & fluorescent	C					
	10061-1D-A2	Luminous & fluorescent	B-C					106A/1250
	10061-1E-A2	Luminous & fluorescent	C					
	*10065-1A-A1	Luminous & fluorescent	N	AN5730-2A			88-I-800	
	**10061-1L-B1	Fluorescent only	A-N	AN5730-6		05-15-5	88-I-801	

*Mark 1 Model 0 for Flying boats.
**Night Fighter type, A. E. Reference Number 60-1454, may be substituted for other types in an emergency.



TRANSMITTER—REMOTE INDICATING MAGNETIC COMPASS

AN5730-3 F. S. S. C. NUMBER 88-T-1950

NAMES: Remote indicating magnetic compass transmitter
Remote reading magnetic compass transmitter
Transmitter—remote indicating compass
Transformer—compass remote indicating (Navy)
Compass—transmitter—remote reading magnetic

DESCRIPTION: This is a component part of the AN5730 Remote Indicating Magnetic Compass. The transmitter contains the compass elements and an alternating current motor which transmits the compass direction to the indicator mounted remotely in the pilot's cockpit.

CHARACTERISTICS:

Location	in wing or tail
Weight	approximately 2¾ pounds
Dimensions	approximately 5 3/16 by 5⅝ inches
Electrical plug	AN3106-14S-2S

ARMY

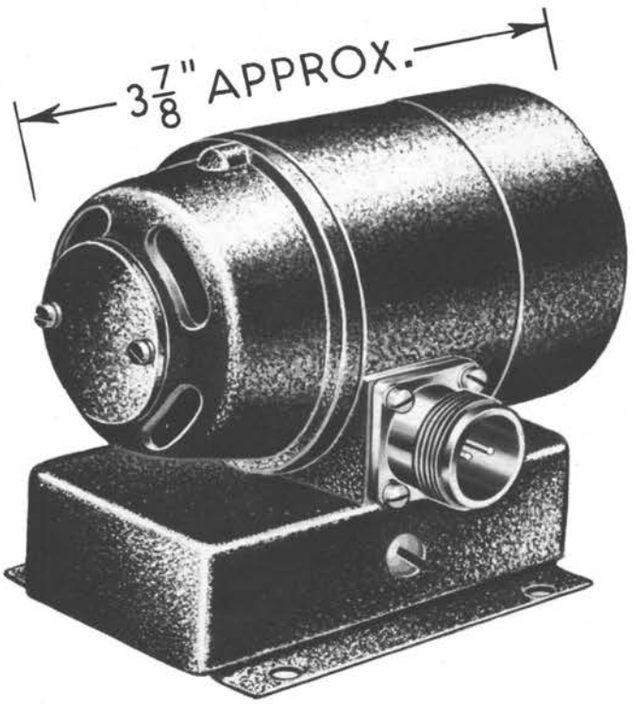
A. E. REFERENCE NUMBER: 60-1452
SPECIFICATIONS:
General AN-GG-C-566a
AN DRAWING NUMBER: AN5730
AN PART NUMBER: AN5730-3
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.
Dimensions of carton . . . . . approximately 6¼ by 6¼ by 6¾ inches
Gross weight . . approximately 3½ pounds

NAVY

SPECIFICATIONS:
General AN-GG-C-566a
AN DRAWING NUMBER: AN5730
AN PART NUMBER: AN5730-3
F. S. S. C. STOCK NUMBER: 88-T-1950
TECHNICAL NOTE NUMBER: Pioneer Overhaul Manual
PROCUREMENT STATUS: Standard. G.F.E. —Order through A. S. O. by F. S. S. C. number.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Pioneer Instrument Div.	10062-1-A	A-N-B	6000437900	05-15-5	106A/1124	
	10066-1-A	N				Mark 1 Model O—for flying boats.
	10062-2-A	B-C			106A/1124	



INVERTER—REMOTE INDICATING MAGNETIC COMPASS

F. S. S. C. NUMBERS—SEE CHART

NAMES: Remote indicating magnetic compass inverter
Remote reading magnetic compass inverter
Inverter—remote indicating compass
Compass—inverter—remote indicating magnetic
Dynamotor—remote reading compass

DESCRIPTION: This inverter transforms direct current from the aircraft electrical system to alternating current for the use of the remote indicating compass, AN5730.

CHARACTERISTICS:

Weight	approximately 2 pounds
Dimensions	approximately 3¼ by 3⅞ by 3½ inches
Electrical plug	AN3106-12S-3S

ARMY

A. E. REFERENCE NUMBER: See chart.

SPECIFICATIONS:

General	94-32270-A

A. S. C. STOCK NUMBER: See chart.

TECHNICAL ORDER NUMBER: 05-15-6

PRODUCTION STATUS: Under procurement.

SHIPPING DATA:

Dimensions of carton	approximately 4 by 4 by 4 inches
Gross weight	approximately 2⅛ pounds

NAVY

F. S. S. C. NUMBER: See chart.

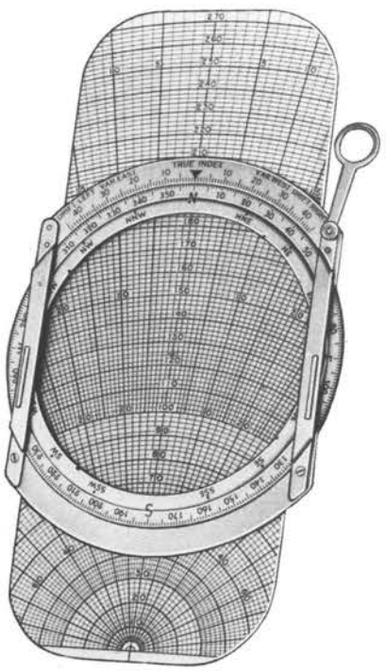
PROCUREMENT STATUS: Standard. G. F. E.—Order through A. S. O. by F. S. S. C. number.

TABULATED ITEMS—NO INTERCHANGEABILITY
Models are used in services as noted in column 5
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part and Drawing Number	Input Voltage	Output Voltage	Used By	A. E. Reference Number	British Reference Number	Air Service Command Stock Number	F. S. S. C. Number
Pioneer Instrument Division	12117-6-A	24-28 volts D.C.	26 volts, 400 cycles	A-N-B	60-1453	106A/1141		88-I-4050
	12117-5-A	12-14 volts D.C.	26 volts, 400 cycles	A-N-B	60-1460	106A/1140		88-I-4000
	12117-2-A	24-28 volts D.C.	26 volts, 400 cycles	A-B		106A/1023	6000262775	

COMPUTER—AERIAL DEAD RECKONING

AN5835-1 FORMER ARMY TYPE E-6B FORMER NAVY TYPE AN1



NAMES: Aerial dead reckoning computer
Computer assembly—aerial dead reckoning
Dead reckoning computer
Computer—navigational—dead reckoning (Navy)
Calculator—dead reckoning

DESCRIPTION: The dead reckoning computer is designed to simplify navigational calculations. When known factors are applied to the computer, it is possible to obtain corrected air speed, altitude, and drift computations. It also has a circular slide rule equipped with a means for plotting the true compass direction on a flight, eliminating the use of the triangulation method.

The face of the computer consists of a plotting disc framed by a graduated compass rose. The plotting disc is made of transparent plastic material on which pencil lines may be drawn and erased. A slide imprinted with lines indicating speed and drift variations may be moved back and forth under the plotting disc.

The back of the computer is a plastic circular slide rule for speed-time-distance computations, with additional scales for airspeed and altitude corrections.

CHARACTERISTICS:
Markings.....luminescent material
Weight.....approximately $\frac{1}{4}$ pound
Dimensions of slide.....approximately $9\frac{1}{2}$ by $3\frac{7}{8}$ inches
Overall diameter of computer.....approximately $5\frac{3}{4}$ inches

ARMY

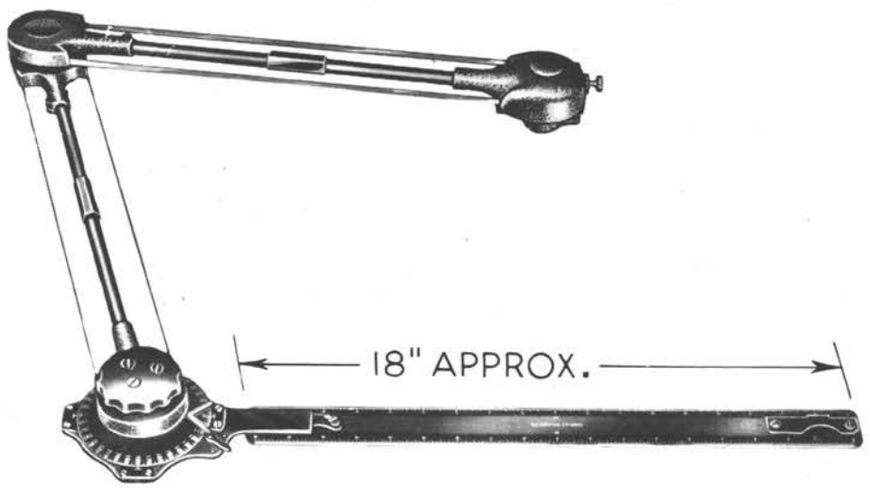
A. E. REFERENCE NUMBER: 45-3550
SPECIFICATIONS:
Detail.....AN-C-74a
Superseded.....94-27892
AN DRAWING NUMBER: AN5835
AN PART NUMBER: AN5835-1
TYPE DESIGNATION: Former Type E-6B
A. S. C. STOCK NUMBER: Refer to column 5 of the chart.
TECHNICAL ORDER NUMBER: Refer to column 6 of the chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

NAVY

TYPE DESIGNATION: AN5835-1 (former Navy type AN1)
SPECIFICATIONS:
Detail.....AN-C-74a
Superseded.....AN-C-74
AN DRAWING NUMBER: AN5835
F. S. S. C. NUMBER: 88C1120
PROCUREMENT STATUS: Under procurement.

Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part Number	Manufacturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
J. B. Carroll Co.	100	100	A-N-B	6200079748	05-35-9	106B/9	
The Star Watch Case Co.	E-6B-100	E-6B-100	A-N-B	6200079740	05-35-9	106B/9	
Cruver Manufacturing Co.	1150	1150	A-N-B	6200079775	05-35-9	106B/9	Metal computer
	1140	1140	A-N-B	6200079755	05-35-9	106B/9	Plastic computer
Stanley Manufacturing Co.	118	118	A-N-B	6200079785	05-35-9	106B/9	
General Luminescent Corp.	1811	1811	A-N-B	6200079788	05-35-9	106B/9	
G. Felsenthal & Sons	FAA-4	FAA-4	A-N-B		05-35-9	106B/9	Brass computer
	FAA-8	FAA-8	A-N-B	6200079745	05-35-9	106B/9	Plastic computer



MACHINE—AIRCRAFT NAVIGATIONAL DRAFTING

AN5750-1 F. S. S. C. NUMBER 88-P-945 FORMER NAVY MARK III B

NAMES: Aircraft navigational drafting machine
Protractor
Drafting table protractor
Aircraft protractor

DESCRIPTION: This is an universal type drafting machine, with scales and protractor adapted to navigational use.

CHARACTERISTICS:

Weight	Instrument and box approximately 8 pounds
Weight	Instrument only approximately 4½ pounds
Scale length	18 inches
Protractor	360 degrees
Arm length (extended)	approximately 36 inches

ARMY

A. E. REFERENCE NUMBER: 60-8150
SPECIFICATIONS:
Detail AN-M-6
MANUFACTURER'S DRAWING NUMBER: Charles Bruning Company, Number 2832
AN DRAWING NUMBER: AN5750 (supersedes Army drawing H42A5292)
AN PART NUMBER: AN5750-1
A. S. C. STOCK NUMBER: 8700583900 (Mark III B)
PRODUCTION STATUS: Not under procurement for initial installation.
SHIPPING DATA: Shipped as a complete unit.

NAVY

TYPE DESIGNATION: Former type Mark III B
SPECIFICATIONS:
Detail AN-M-6
Superseded 18-P-5
AN DRAWING NUMBER: AN5750
AN PART NUMBER: AN5750-1
F. S. S. C. STOCK NUMBER: 88-P-945
TECHNICAL NOTE: BuAer Aircraft Instrument Handbook, Chapter 19
PROCUREMENT STATUS: Sub-standard. Superseded by F. S. S. C. Number 88-M-58.

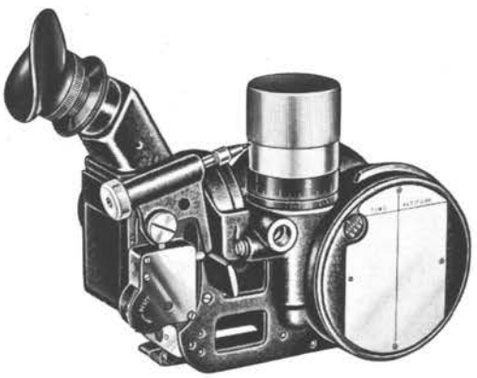
BRITISH

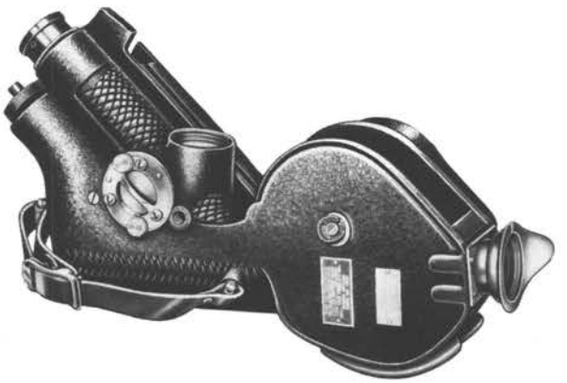
BRITISH REFERENCE NUMBER: 106B/21

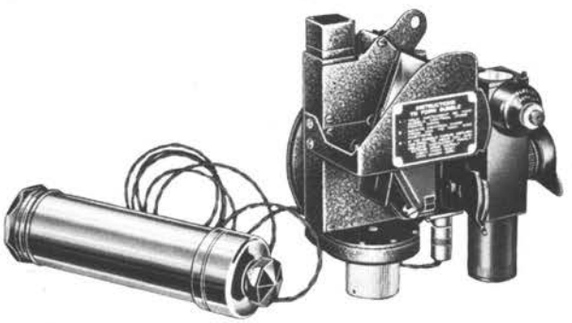
AIRCRAFT SEXTANTS

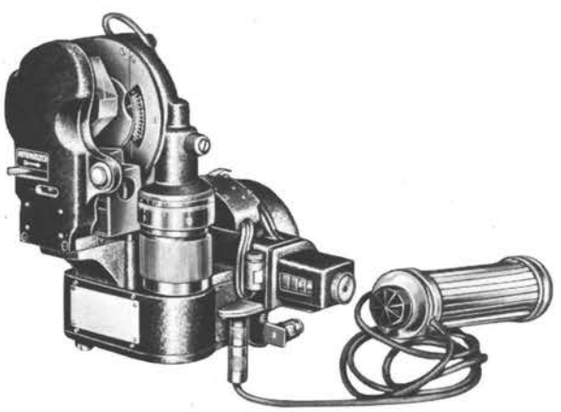
NAMES: Bubble type sextant
Octant

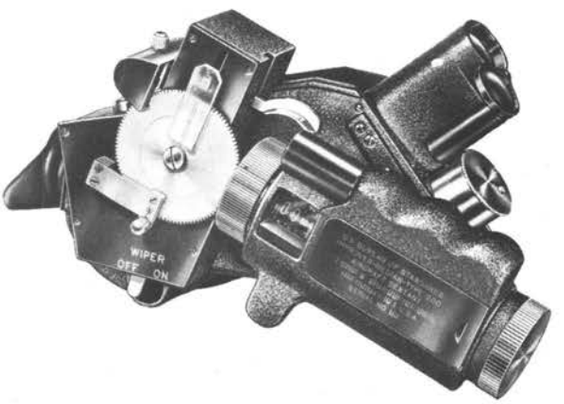
Sextant—aircraft—averaging bubble type











DESCRIPTION: A sextant is an instrument used by navigators to measure the altitude of the sun, stars, or other celestial bodies. From these measurements, and with the aid of an almanac, it is possible to determine the observer's position on the earth's surface.

The altitude of a celestial body is the angle formed between imaginary lines drawn from the observer to the body and to the horizon. Marine navigators use the natural horizon as a reference but, unless an airplane is flying in daylight at less than 1000 feet above sea level and visibility is good, the aerial navigator cannot use the natural horizon.

(Continued on page 281)

AIRCRAFT SEXTANTS

(Continued from page 280)

To provide a horizon reference, airplane sextants incorporate a bubble which acts as an artificial horizon. When using the bubble horizon the image of the celestial body is caused to coincide with the center of the bubble, and a recording counter, or graduated arc, enables the observer to read the altitude of the observed body above the bubble horizon. This artificial horizon is accurate only when the observer is stationary or moving at a uniform rate of speed. Accelerations in an airplane cause the bubble to be deflected from the vertical so that an error is introduced when the bubble is aligned with the celestial body for a sight or "shot." This error may be as much as one degree (equivalent to a 60-mile error in position). To reduce this error, aircraft sextants have averaging devices, and a number of sights are taken over a one- or two-minute period. Averaging errors usually enables the navigator to find his position within 5 miles.

Various averaging devices are used, the median averager being the most common. In this type, a pencil makes a mark on a drum when a sight is taken. At the end of two minutes, the navigator sets a pointer on the center of the marks and reads the altitude. Chronometric averaging devices employ clockwork which automatically records the average altitude when the navigator follows the movements of the celestial body over a two-minute period.

Internal artificial lighting permits a sextant to be used in taking sights at night by providing an illuminated bubble.

ARMY

A. E. REFERENCE NUMBER: 60-8500 (Former A. E. REFERENCE NUMBER: 45-9000)

Type	Specification	Drawing Number	Part Number
Former A-12	AN-S-29	AN5852	AN5852-1
None	AN-S-28	AN5851	AN5851-1
A-10	None	See chart	See chart
A-8A	94-27914A	See chart	See chart
A-7	94-27912	See chart	See chart

PRODUCTION STATUS: Under procurement except for A-7.

SHIPPING DATA: Shipped as a unit, complete with carrying case.

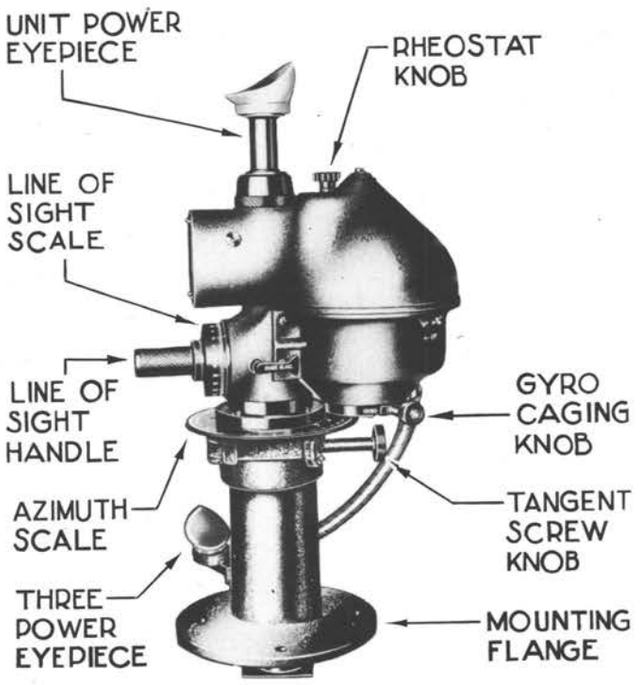
NAVY

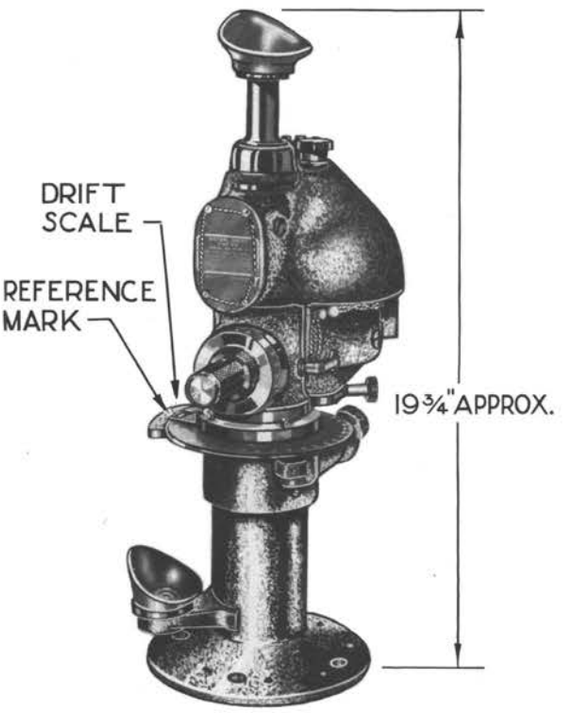
PROCUREMENT STATUS: See chart for sextants under procurement.

ALL MODELS ON THIS PAGE ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Type Designation	Manufacturer's Drawing and Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	F. S. S. C.	Natural Horizon Provision	Weight	Bubble Field Illumination	Averaging Device	Battery Container	Remarks
Pioneer Instrument Division of Bendix Aviation Corp.	AN5851-1	3014-1-C	A-N-B	6200327978	05-35-22	106B/53	88-S-350	Yes	7 pounds	Dark	Chronometric	Separate	
	AN5851-1	3014-1-D	A-N-B	6200327980	05-35-22	106B/53	88-S-350	Yes	7 pounds	Dark	Chronometric	Separate	
Link Aviation Devices, Inc.	A-12	11734	A-N-B	6200330975	05-35-15	106B/152	88-S-360	No	5¾ pounds	Bright	Median	Integral	See Note 1. British Designation C-9
Fairchild Aviation Corp.	A-10	E-320-D1	A-B	6200330937	05-35-12	106B/50		No	6 pounds	Dark	Median	Separate	
Bausch & Lomb Optical Co.	A-8A	29499	A-B	6200330925	05-35-7	106B/49		Yes		Dark	Automatic (8 observations)	Integral	
Pioneer Instrument Division of Bendix Aviation Corp.	A-7	Part 3003-A Drawing PD-23431-1	A-B	6200330900	05-35-4	106B/48		Yes	6 pounds	Dark	Automatic (8 observations)	Integral	Not under procurement.
	A-7	Part 3003-B Drawing PD-23431-2	A-B	6200330905	05-35-4	106B/48		Yes	6 pounds	Dark	Automatic (8 observations)	Integral	Not under procurement.
	A-7	Part 3011-A Drawing PD-17633-1	A-B		05-35-4	106B/48		Yes	6 pounds	Dark	Automatic (8 observations)	Integral	Not under procurement.
	A-7	Part 3011-B Drawing PD-17633-2	A-B		05-35-4	106B/48		Yes	6 pounds	Dark	Automatic (8 observations)	Integral	Not under procurement.

NOTE 1. The A-12 sextant is intended for instruction purposes only, but may be used in the field if no other types are available.





METER—DRIFT

ARMY TYPE B-3

NAMES: Drift meter
Recorder drift
Sights drift

DESCRIPTION:

FUNCTION:

The B-3 drift meter is a navigational instrument which has three distinct functions. It derives its name from its most important function, which is the measurement of the angle between the heading of the aircraft and its actual path over the ground. This angle is known as a drift angle, and it is caused by contrary cross winds.

A secondary function is the measurement of the horizontal angle between the heading of the aircraft and any object; this angle is known as an azimuth bearing. The meter may also be used to determine the true ground speed of the aircraft.

INSTALLATION:

The drift meter is mounted vertically in the navigator's compartment by a circular mounting flange; its periscopic tube extends from 5 to 6 inches below the fuselage.

COMPOSITION:

For the sake of analysis, the drift meter can be divided into three systems: A. Optical system; B. Gyroscopic system; C. Control system.

A. The Optical System:

The optical system is nothing more than a periscope which is coupled with a means of reticle reflection. The reticle is a glass plate upon which radio-active lines are etched. The reflection and superimposition of these lines on the image of a sighted object is accomplished by a series of prisms and lenses. The source of illumination for the reticle is a small lamp. The density of light is controlled by a rheostat.

B. The Gyroscopic System:

The gyro is driven by a small alternating current motor at the speed of ten thousand six hundred revolutions per minute.

The sole purpose of the gyroscope is to keep the reticle plate parallel to the ground, thereby affording a fixed reference from which the drift reading can be taken. The gyro will perform this function effectively when the roll and pitch of the aircraft is not more than twenty degrees from the normal flight position. In excess of these limits, the gyro should be caged to protect its delicate mechanism.

C. The Control System:

The controls coordinate and calibrate the movement of the optical and gyroscopic systems.

The primary optical control is the line of sight handle, which is used to adjust the line of sight through the periscope from seventeen degrees forward to eighty-seven degrees aft. The movement of this handle is recorded on a scale located on its flange.

A tangent screw knob is used to pivot the entire upper gyro housing and lower periscopic tube. The mounting flange and the lower gyro housing are cast in one piece, and are immovable. The movement of the upper housing and tube enable the navigator to adjust the reticle lines parallel to the apparent movement of ground objects. The movement of the knob is recorded on the drift scale, which shows the amount of drift in degrees. The knob is actually operated as though it were two controls instead of one, for it has two positions, engaged and disengaged. In the engaged position, it effects a finite control over the pivot movement, thereby giving precision to the drift recording. In the disengaged position, the pivoting is accomplished by pushing or pulling the line of sight handle in the desired direction. This disengaged movement allows rotation of three hundred sixty degrees, and the navigator is thereby able to determine the relative azimuth bearing of any object by reading it in degrees on the azimuth scale.

(Continued on Page 283)

METER—DRIFT

(*Continued from Page 282*)

The gyro controls consist of a caging knob and a starting switch, which enable the navigator to protect the mechanism, as mentioned before.

A shading lens is installed in the periscope to control the density of objective reflection. This can be turned in or out, depending upon outside lighting conditions.

INTERCHANGEABILITY:

Various models of the B-3 drift meter which have different tube lengths cannot be interchanged from one aircraft to another, due to the fact that this interchanging would necessitate the changing of the tube length. Changing the tube on the drift meter requires a working time of approximately twenty-four hours, and can only be accomplished in a qualified depot by skilled personnel.

Kueffel and Esser formerly produced a B-3 drift meter with a vacuum driven gyro. Since this model is no longer in production, and there is but a very limited number in service, it has not been considered important enough to cover herein. However, no interchangeability can be effected between the electrically driven and the hydraulically driven gyro drift meters, as this would necessitate the installation of entirely different connections in the aircraft.

CHARACTERISTICS:

Weight ..... approximately 20 to 30 pounds, depending upon the length of the tube
Dimensions above mounting flange ..... approximately $19\frac{11}{16}$ by $11\frac{11}{32}$ by $6\frac{19}{32}$ inches
Index prism range ..... 17° forward to 87° aft
Electrical supply necessary ..... 110 volt alternating current, 400 cycles

ARMY

A. E. REFERENCE NUMBER: Refer to chart.

SPECIFICATIONS:

Detail 94-27796-A
Superseded 94-27796

TYPE DESIGNATION: B-3

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: 05-25DA-2

PRODUCTION STATUS:

60-8000 under procurement.
60-8005 not under procurement for initial installation.
60-8010 under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

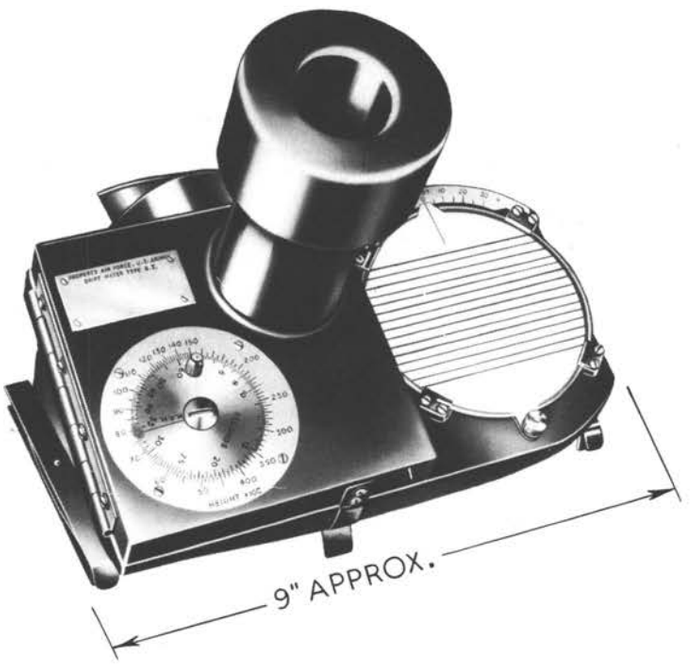
There is no Navy equivalent for the Army item.

Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

A. E. Reference Number	Tube Length (In Inches)	Pioneer Model Number	Used By	Air Service Command Stock Number	British Reference Number	Current Model (X)
60-8000	27	2902-2A-A	A	6000289890		
	27	2902-2A-B	A-B	6000289895	106B/4	
	27	2902-2A-C	A	6000289896		
	27	2913-2A-A	A	6000289900		
	27	2913-2A-B	A	6000289905		
	27	2914-2A-A	A-B	6000289910	106B/24	
	27	2914-2A-B	A	6000289915		X
	27	2913-2B-A	C			
	27	2914-2B-A	C			
	27	2914-2A-C	C			
60-8005	40	2915-2A-A	A	6000290120		
	40	2915-2A-B	A	6000290130		
	40	2916-2A-A	A	6000289920		
	40	2916-2A-B	A	6000289775	106B/47	X
	40	2916-2B-A	C			
	40	2916-2B-B	C			
	40	2916-2A-C	C			
60-8010	51	2919-2A-A	A	6000290080		X
	51	2919-2A-B	C			

METER—DRIFT

ARMY TYPE B-5

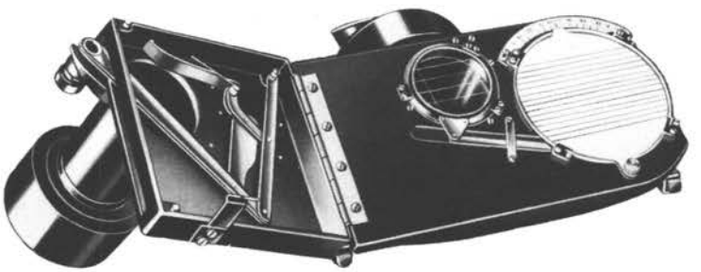


NAMES: Drift meter
Recorder drift
Sights, drift

DESCRIPTION: The B-5 drift meter is used to measure the angle between the heading of the airplane and its actual path over the ground. It is also adapted for the determination of ground speed. The instrument reticle is not stabilized. A recording feature averages out the effects of pitch and roll. The instrument tube projects from the side of the airplane.

CHARACTERISTICS:

Weight.....approximately 8 pounds
Overall dimensions..approximately 12¼ by 9 by 7½ inches
Field of view in object space.....35 degrees
Drift scale limits.....30 degrees right and left



ARMY

A. E. REFERENCE NUMBER: 60-8050

SPECIFICATIONS:

Detail.....94-27402
Superseded.....27402-1

TYPE DESIGNATION: B-5

A. S. C. STOCK NUMBER: Refer to chart.

TECHNICAL ORDER NUMBER: Refer to chart.

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

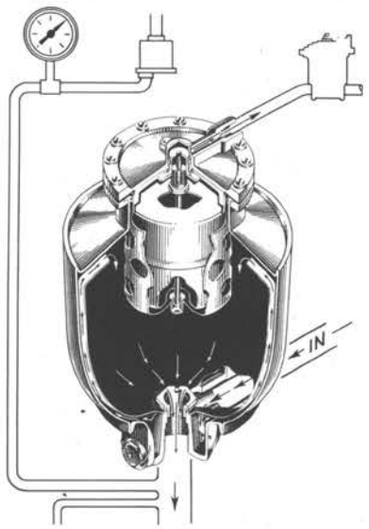
NAVY

There is no Navy equivalent for the Army item.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Numbers (American Assigned)	British Reference Numbers (United Kingdom Assigned)
Canadian Kodak Co.	U-9258	A-B	6000291050*	05-35-20	106B/13	6B/190
Eastman Kodak Co.	U-9258	A-B	6000291050*	05-35-20	106B/13	6B/190
General Analine Film Laboratory, Agfa-Ansco Co.	U-9258	A-B	6000291050*	05-35-20	106B/13	6B/190

*For reference to British Procurement (U. K. 6B/190) use A. S. C. Stock Number 6000291025.



ELIMINATOR—FUEL SYSTEM AIR VAPOR

ARMY TYPE A-6

NAMES: Fuel system air vapor eliminator — Eliminator
Air eliminator

DESCRIPTION: The type A-6 air eliminator is a small fuel reserve tank, located in the fuel system between the fuel pump and the carburetor. It provides a reserve fuel supply, and serves to trap air and vapor which enter the unit through the inlet fuel line. At such times, a float and float valve assembly attached to the tank cover function to vent the eliminator and free the fuel of air and vapor, preventing their entrance into the carburetor.

Since the eliminator is designed to be used with high pressure carburetors, adequate fuel pressure must be maintained on the carburetor during the venting periods. Consequently, it is necessary to use the eliminator in conjunction with an air vapor control valve. This valve is located in the vent line between the eliminator and the fuel tanks.

The eliminator consists of a double shell, the inner one extending about three-quarters of the way to the cover, thereby acting as a dam over which the incoming fuel flows. The fuel passes upward from the inlet through the space between the inner and outer shells, and flows over the inner shell into the reserve space, which represents most of the area of the eliminator. The inner space thus serves the double purpose of providing reserve fuel space and the space needed in which to operate the float.

The reserve fuel contained in the inner chamber keeps the engine supplied with fuel during the time required to switch the fuel selector cock from one fuel supply tank to another.

CHARACTERISTICS:

Overall dimensions	approximately 9⅜ by 6¼ by 6¼ inches
Weight	approximately 3 pounds
Fuel capacity	approximately ½ gallon

RELATIONSHIP OF PARTS: Used with:

Air vapor control valve	A. E. Reference Number 61-9600

ARMY

A. E. REFERENCE NUMBER: 61-2075

SPECIFICATIONS:

Detail	94-28429
Superseded	28429

A. A. F. DRAWING NUMBER: Formerly made according to A. A. F. drawing number 41D1832, but is now manufactured according to King-Seeley Corp. part and drawing number 3200.

TYPE DESIGNATION: A-6

A. S. C. STOCK NUMBER: 48233200

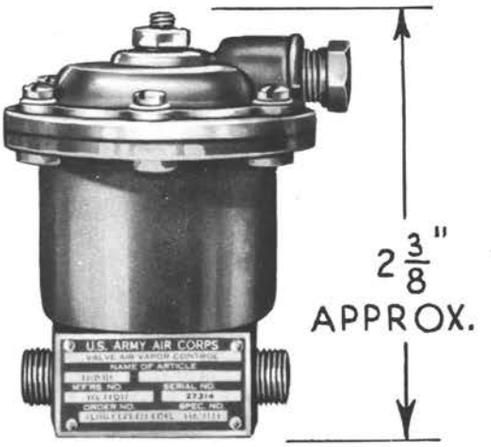
TECHNICAL ORDER NUMBER: 03-10-24

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.



VALVE—AIR VAPOR CONTROL

KING-SEELEY CORP. PART NUMBER 32100

NAMES: Air vapor control valve
Pressure control relief valve

DESCRIPTION: This valve is used with the A-6 air vapor eliminator for limiting pressure on the fuel system while the eliminator is in operation. The inlet opening is coupled to the vent connection of the eliminator, and the outlet opening is attached to a line terminating in the top side of the fuel tank. The valve operates as a pressure-setting relief device by venting to the fuel tanks air or vapor delivered by the eliminator, and maintaining a predetermined pressure on the system during the venting period. The setting is adjustable for any pressure from 6 to 14 pounds per square inch. Sufficient pressure is always carried to feed the carburetor, and it is maintained while valves are being turned in changing from one fuel tank to another.

CHARACTERISTICS:
Weight.....approximately ½ pound
Overall dimensions.....approximately 2⅛ by 2⅛ by 2¾ inches

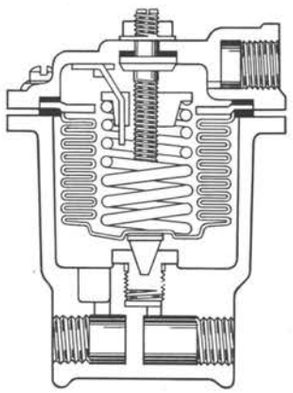
RELATIONSHIP OF PARTS: Used with:
Army type A-6 air vapor eliminator, A. E. Reference No. 61-2075

ARMY

A. E. REFERENCE NUMBER: 61-9600
SPECIFICATIONS: Detail.....27314
A. S. C. STOCK NUMBER: Refer to chart.
TECHNICAL ORDER NUMBER: Refer to chart.
PRODUCTION STATUS: Under procurement.
SHIPPING DATA: Shipped as a complete unit.

NAVY

There is no Navy equivalent for the Army item.



MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A-Army, N-Navy, B-British, C-Commercial

Manufacturer	Manufacturer's Model Identification	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	Remarks
King-Seeley Corp.	C-2	32100	A	482332100	03-10-23	
	C-2	32040	A	482332040	03-10-23	Superseded by manufacturer's part 32100.
	C-2	32075	A	482332075	03-10-23	Superseded by manufacturer's part 32075.

WALTER L