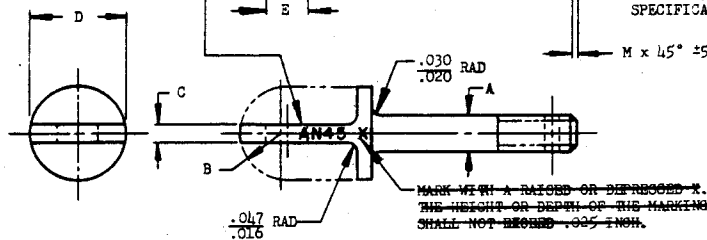


HAYABUSA (REV. F-1)

NOTE: When Government drawings, specifications, or other data are used for any purpose other than in connection with a technically related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government is the source of such data shall not be construed as an endorsement, approval, or other form of certification, or as implying that the Government is in any way guaranteeing the accuracy, reliability, or other data in use to be regarded by implication or otherwise as an endorsement, approval, or other form of certification, or as implying that the Government is in any way guaranteeing the accuracy, reliability, or other data in use to be regarded by implication or otherwise as an endorsement, approval, or other form of certification.

NOTE: The drawing was approved by joint action of the Air Force and Navy Departments as the Air Force-Navy standard for this product. The drawing represents all interrelated standard drawings for the same product and shall be used in conjunction with the drawing of associated supplies, or for use in new designs, not later than 6 months after the latest date of approval shown.

MARK BASIC AN PART NO. HERE.
(MARKING FOR AN45 BOLT SHOWN)
APPLICABLE BASIC AN PART NO. SHOWN
IN FIRST COLUMN OF TABLE. MARKING
TO BE DEPRESSED AND SHALL NOT EX-
CEED .025 INCH IN DEPTH.



(GRIP, NOMINAL *H, NOMINAL) *1/64

FSC 5306

BASIC AN PART NO.	THREAD T	A DIA		B RAD	C ±.005	D DIA	E DIA		F ±.010	(a) H REF	J	K	L	M	RATED STRENGTH, POUNDS		(a) PIN DIA REF
		MAX	MIN				MAX	MIN							TENSILE STRENGTH OF EYE	YIELD STRENGTH OF EYE	
(c) AN42	NO. 10-32 UNF-3A	.189	.186	7/32	.094	7/16	.191	.188	.070	17/64	1/32	13/32	1/16	1/32	1 150	880	3/16
AN42B							.192	.190									
(c) AN43	1/4-28 UNF-3A	.249	.246	1/4	.125	1/2	.191	.188	.076	5/16	1/32	15/32	5/64	1/32	2 450	1 880	3/16
AN43B							.192	.190									
AN44	5/16-24 UNF-3A	.312	.309	5/16		5/8	.253	.250	.076	12/64	1/16	17/32			3 910	3 000	1/4
AN45	5/16-24 UNF-3A	.312	.309	11/32	.188	11/16	.316	.313	.076	23/64	3/64	19/32	3/32	3/64	5 290	4 055	5/16
AN46	3/8-24 UNF-3A	.374	.371	3/8		3/4	.378	.375	.106	7/16	1/16	19/32			7 015	5 375	3/8
AN47	7/16-20 UNF-3A	.437	.433	7/16	.250	7/8	.378	.375	.106	31/64	1/16	23/32			9 200	7 055	3/8
AN48	1/2-20 UNF-3A	.499	.495	1/2	.313	1	.441	.438	.106	39/64	1/16	13/16	1/8	3/64	14 375	11 020	7/16
AN49	9/16-18 UNF-3A	.562	.558	19/32	.375	1-3/16	.503	.500	.111	21/32	5/64	15/16		1/16	20 125	15 430	1/2

(a) REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT AN INSPECTION REQUIREMENT.

(b) GRIP LENGTH OF BOLTS SHALL BE MEASURED FROM THE UNDERSIDE OF THE HEAD TO THE END OF THE FULL CYLINDRICAL PORTION OF THE SHANK. COMPLETE THREADS SHALL BEGIN WITHIN TWO THREAD PITCH MAXIMUM. TWO THREAD PITCH MAXIMUM MAY CONSIST OF INCOMPLETE THREAD OR EXTRUSION ANGLE.

(c) BOLTS WITH BASIC PART NUMBERS AN42 AND AN43 INACTIVE FOR DESIGN AFTER 4 APRIL 1955. IN LIEU THEREOF, USE BOLTS WITH BASIC PART NUMBERS AN42B AND AN43B.

FOR DEFINITION AND APPLICATION OF DRAWING STATUS NOTES, SEE ANA BULLETIN NO. 337.

MATERIAL: NON-CORROSION-RESISTANT STEEL OR CORROSION-RESISTANT STEEL. SEE PROCUREMENT SPECIFICATION.

(5) FINISH: SEE PROCUREMENT SPECIFICATION.

ADD A AFTER DASH NUMBER FOR BOLT WITHOUT DRILLED HOLE IN SHANK.

ADD C BEFORE DASH NUMBER FOR CORROSION-RESISTANT STEEL BOLT.

EXAMPLES OF PART NUMBERS: AN46-10 = 3/8-24 NON-CORROSION-RESISTANT STEEL EYE BOLT, 1-5/64 LONG HAVING 7/16 GRIP AND WITH DRILLED HOLE IN SHANK.
AN46-10A = 3/8-24 NON-CORROSION-RESISTANT STEEL EYE BOLT, 1-5/64 LONG HAVING 7/16 GRIP AND WITHOUT DRILLED HOLE IN SHANK.
AN46-C10 = 3/8-24 CORROSION-RESISTANT STEEL EYE BOLT, 1-5/64 LONG HAVING 7/16 GRIP AND WITH DRILLED HOLE IN SHANK.
AN46-C10A = 3/8-24 CORROSION-RESISTANT STEEL EYE BOLT, 1-5/64 LONG HAVING 7/16 GRIP AND WITHOUT DRILLED HOLE IN SHANK.
AN43B-C10A = 1/4-28 CORROSION-RESISTANT STEEL EYE BOLT, 1-1/32 LONG HAVING 9/16 GRIP AND WITHOUT DRILLED HOLE IN SHANK.

BOLTS SHALL BE FREE FROM ALL HANGING BURRS AND SLIVERS WHICH MIGHT BECOME DISLODGED UNDER USAGE.

COUNTERSINKING OF DRILLED HOLE IN SHANK IS OPTIONAL. PIN HOLE E SHALL NOT BE COUNTERSUNK.

DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: FRACTIONS *1/64.

(5) FOR CHANGES SEE SHEET 1.

PROCUREMENT SPECIFICATION

MIL-B-6812

AIR FORCE-NAVY AERONAUTICAL STANDARD

BOLT, EYE

AN42 THRU AN49

SHEET 1 OF 2

SUPERSEDES FORMER AIR FORCE AND NAVY STANDARD ISSUES OF AN42 THROUGH AN49.

APPROVED 15 Jan 13 REVISED 3 4 Apr 55 10 Jun 66 23 Feb 67 4 Aug 82

AMO 9-2

NAVAIR 1090A (Rev. 5-61)

ABBOTTAEROSPACE.COM

DASH NO.	ANL2		ANL2B		ANL3		ANL3B		ANL4		ANL5		ANL6		ANL7		ANL8		ANL9	
	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64	GRIP	LENGTH +1/32 -1/64
3	1/16	15/32																		
4	1/8	17/32	1/16	17/32	1/16	17/32	1/16	19/32	1/16	19/32										
5	1/4	21/32	3/16	21/32	3/16	23/32	3/16	23/32	3/16	23/32	1/16	45/64	1/16	23/32						
6	3/8	25/32	7/16	25/32	5/16	27/32	5/16	27/32	5/16	27/32	3/16	53/64	3/16	27/32	1/16	27/32	1/16	31/32		
7	5/8	29/32	5/16	29/32	7/16	31/32	7/16	31/32	7/16	31/32	5/16	61/64	5/16	31/32	3/16	31/32	1/8	1- 1/32		
10	1- 1/2	1- 1/32	9/16	1- 1/32	9/16	1- 1/32	9/16	1- 1/32	9/16	1- 1/32	7/16	1- 5/64	7/16	1- 1/32	5/16	1- 1/32	1/4	1- 5/32		
11	3/4	1- 5/32	11/16	1- 5/32	11/16	1- 7/32	11/16	1- 7/32	11/16	1- 7/32	9/16	1-13/64	9/16	1- 7/32	7/16	1- 7/32	3/8	1- 9/32		
12	7/8	1- 9/32	13/16	1- 9/32	13/16	1-11/32	13/16	1-11/32	13/16	1-11/32	11/16	1-21/64	11/16	1-11/32	9/16	1-11/32	1/2	1-13/32		
13	1-1/32	1-13/32	15/16	1-13/32	15/16	1-15/32	15/16	1-15/32	15/16	1-15/32	13/16	1-29/64	13/16	1-15/32	11/16	1-15/32	5/8	1-17/32		
14	1-1/8	1-17/32	1- 1/16	1-17/32	1- 1/16	1-19/32	1- 1/16	1-19/32	1- 1/16	1-19/32	15/16	1-37/64	15/16	1-19/32	13/16	1-19/32	3/4	1-21/32		
15	1-1/4	1-21/32	1- 3/16	1-21/32	1- 3/16	1-23/32	1- 3/16	1-23/32	1- 3/16	1-23/32	1- 1/16	1-45/64	1- 1/16	1-23/32	15/16	1-23/32	7/8	1-25/32		
16	1-1/8	1-25/32	1- 5/16	1-25/32	1- 5/16	1-27/32	1- 5/16	1-27/32	1- 5/16	1-27/32	1- 3/16	1-53/64	1- 3/16	1-27/32	1- 1/16	1-27/32	1	1-29/32		
17	1-1/2	1-29/32	1- 7/16	1-29/32	1- 7/16	1-31/32	1- 7/16	1-31/32	1- 7/16	1-31/32	1- 5/16	1-61/64	1- 5/16	1-31/32	1- 5/16	1-31/32	1-1/8	2- 1/32		
20	1-5/8	2- 1/32	1- 9/16	2- 1/32	1- 9/16	2- 3/32	1- 9/16	2- 3/32	1- 9/16	2- 3/32	1- 7/16	2- 5/64	1- 7/16	2- 3/32	1- 5/16	2- 3/32	1-1/4	2- 5/32		
21	1-3/4	2- 5/32	1-11/16	2- 5/32	1-11/16	2- 7/32	1-11/16	2- 7/32	1-11/16	2- 7/32	1- 9/16	2-13/64	1- 9/16	2- 7/32	1- 7/16	2- 7/32	1-3/8	2- 9/32		
22	1-7/8	2- 9/32	1-13/16	2- 9/32	1-13/16	2-11/32	1-13/16	2-11/32	1-13/16	2-11/32	1-11/16	2-21/64	1-11/16	2-11/32	1- 5/16	2-11/32	1-1/2	2-13/32		
23	2	2-13/32	1-15/16	2-13/32	1-15/16	2-15/32	1-15/16	2-15/32	1-15/16	2-15/32	1-13/16	2-29/64	1-13/16	2-15/32	1-11/16	2-15/32	1-5/8	2-17/32		
24	2-1/8	2-17/32	2- 1/16	2-17/32	2- 1/16	2-19/32	2- 1/16	2-19/32	2- 1/16	2-19/32	1-15/16	2-37/64	1-15/16	2-19/32	1-13/16	2-19/32	1-3/4	2-21/32		
25	2-1/4	2-21/32	2- 3/16	2-21/32	2- 3/16	2-23/32	2- 3/16	2-23/32	2- 3/16	2-23/32	2- 1/16	2-45/64	2- 1/16	2-23/32	1-15/16	2-23/32	1-7/8	2-25/32		
26	2-3/8	2-25/32	2- 5/16	2-25/32	2- 5/16	2-27/32	2- 5/16	2-27/32	2- 5/16	2-27/32	2- 3/16	2-53/64	2- 3/16	2-27/32	2- 1/16	2-27/32	2	2-29/32		
27	2-1/2	2-29/32	2- 7/16	2-29/32	2- 7/16	2-31/32	2- 7/16	2-31/32	2- 7/16	2-31/32	2- 5/16	2-61/64	2- 5/16	2-31/32	2- 5/16	2-31/32	2-1/8	3- 1/32		
30	2-5/8	3- 1/32	2- 9/16	3- 1/32	2- 9/16	3- 1/32	2- 9/16	3- 1/32	2- 9/16	3- 1/32	2- 7/16	3- 5/64	2- 7/16	3- 1/32	2- 5/16	3- 1/32	2-1/4	3- 1/32		
31	2-3/4	3- 5/32	2-11/16	3- 5/32	2-11/16	3- 7/32	2-11/16	3- 7/32	2-11/16	3- 7/32	2- 9/16	3-13/64	2- 9/16	3- 7/32	2- 7/16	3- 7/32	2-3/8	3- 3/32		
32	2-7/8	3- 9/32	2-13/16	3- 9/32	2-13/16	3-11/32	2-13/16	3-11/32	2-13/16	3-11/32	2-11/16	3-21/64	2-11/16	3-11/32	2- 9/16	3-11/32	2-1/2	3-13/32		
33	3	3-13/32	2-15/16	3-13/32	2-15/16	3-15/32	2-15/16	3-15/32	2-15/16	3-15/32	2-13/16	3-29/64	2-13/16	3-15/32	2-11/16	3-15/32	2-5/8	3-17/32		
34	3-1/4	3-17/32	3- 1/16	3-17/32	3- 1/16	3-19/32	3- 1/16	3-19/32	3- 1/16	3-19/32	2-15/16	3-37/64	2-15/16	3-19/32	2-13/16	3-19/32	2-3/4	3-21/32		
35	3-1/8	3-21/32	3- 3/16	3-21/32	3- 3/16	3-23/32	3- 3/16	3-23/32	3- 3/16	3-23/32	3- 1/16	3-45/64	3- 1/16	3-23/32	2-15/16	3-23/32	2-7/8	3-25/32		
36	3-3/8	3-25/32	3- 5/16	3-25/32	3- 5/16	3-27/32	3- 5/16	3-27/32	3- 5/16	3-27/32	3- 3/16	3-53/64	3- 3/16	3-27/32	3- 1/16	3-27/32	3	3-29/32		
37	3-1/2	3-29/32	3- 7/16	3-29/32	3- 7/16	3-31/32	3- 7/16	3-31/32	3- 7/16	3-31/32	3- 5/16	3-61/64	3- 5/16	3-31/32	3- 5/16	3-31/32	3-1/8	4- 1/32		
40	3-5/8	4- 1/32	3- 9/16	4- 1/32	3- 9/16	4- 1/32	3- 9/16	4- 1/32	3- 9/16	4- 1/32	3- 7/16	4- 5/64	3- 7/16	4- 1/32	3- 5/16	4- 1/32	3-1/4	4- 5/32		
41	3-3/4	4- 5/32	3-11/16	4- 5/32	3-11/16	4- 7/32	3-11/16	4- 7/32	3-11/16	4- 7/32	3- 9/16	4-13/64	3- 9/16	4- 7/32	3- 7/16	4- 7/32	3-1/2	4- 9/32		
42	3-7/8	4- 9/32	3-13/16	4- 9/32	3-13/16	4-11/32	3-13/16	4-11/32	3-13/16	4-11/32	3-11/16	4-21/64	3-11/16	4-11/32	3- 5/16	4-11/32	3-3/8	4-13/32		
43	4	4-13/32	3-15/16	4-13/32	3-15/16	4-15/32	3-15/16	4-15/32	3-15/16	4-15/32	3-13/16	4-29/64	3-13/16	4-15/32	3-11/16	4-15/32	3-5/8	4-17/32		
44	4-1/8	4-17/32	4- 1/16	4-17/32	4- 1/16	4-19/32	4- 1/16	4-19/32	4- 1/16	4-19/32	3-15/16	4-37/64	3-15/16	4-19/32	3-13/16	4-19/32	3-3/4	4-21/32		
45	4-1/4	4-21/32	4- 3/16	4-21/32	4- 3/16	4-23/32	4- 3/16	4-23/32	4- 3/16	4-23/32	4- 1/16	4-45/64	4- 1/16	4-23/32	3-15/16	4-23/32	3-7/8	4-25/32		
46	4-3/8	4-25/32	4- 5/16	4-25/32	4- 5/16	4-27/32	4- 5/16	4-27/32	4- 5/16	4-27/32	4- 3/16	4-53/64	4- 3/16	4-27/32	4- 1/16	4-27/32	4	4-29/32		
47	4-1/2	4-29/32	4- 7/16	4-29/32	4- 7/16	4-31/32	4- 7/16	4-31/32	4- 7/16	4-31/32	4- 5/16	4-61/64	4- 5/16	4-31/32	4- 5/16	4-31/32	4-1/8	5- 1/32		
50	4-5/8	5- 1/32	4- 9/16	5- 1/32	4- 9/16	5- 1/32	4- 9/16	5- 1/32	4- 9/16	5- 1/32	4- 7/16	5- 5/64	4- 7/16	5- 1/32	4- 5/16	5- 1/32	4-1/4	5- 1/32		
51	4-3/4	5- 5/32	4-11/16	5- 5/32	4-11/16	5- 7/32	4-11/16	5- 7/32	4-11/16	5- 7/32	4- 9/16	5-13/64	4- 9/16	5- 7/32	4- 7/16	5- 7/32	4-3/8	5- 9/32		
52	4-7/8	5- 9/32	4-13/16	5- 9/32	4-13/16	5-11/32	4-13/16	5-11/32	4-13/16	5-11/32	4-11/16	5-21/64	4-11/16	5-11/32	4- 9/16	5-11/32	4-1/2	5-13/32		
53	5	5-13/32	4-15/16	5-13/32	4-15/16	5-15/32	4-15/16	5-15/32	4-15/16	5-15/32	4-13/16	5-29/64	4-13/16	5-15/32	4-11/16	5-15/32	4-5/8	5-17/32		
54	5-1/8	5-17/32	5- 1/16	5-17/32	5- 1/16	5-19/32	5- 1/16	5-19/32	5- 1/16	5-19/32	4-15/16	5-37/64	4-15/16	5-19/32	4-11/16	5-19/32	4-3/4	5-21/32		
55	5-1/4	5-21/32	5- 3/16	5-21/32	5- 3/16	5-23/32	5- 3/16	5-23/32	5- 3/16	5-23/32	5- 1/16	5-45/64	5- 1/16	5-23/32	4-15/16	5-23/32	4-7/8	5-25/32		
56	5-3/8	5-25/32	5- 5/16	5-25/32	5- 5/16	5-27/32	5- 5/16	5-27/32	5- 5/16	5-27/32	5- 3/16	5-53/64	5- 3/16	5-27/32	5- 1/16	5-27/32	5	5-29/32		
57	5-1/2	5-29/32	5- 7/16	5-29/32	5- 7/16	5-31/32	5- 7/16	5-31/32	5- 7/16	5-31/32	5- 5/16	5-61/64	5- 5/16	5-31/32	5- 5/16	5-31/32	5-1/8	6- 1/32		
60	5-5/8	6- 1/32	5- 9/16	6- 1/32	5- 9/16	6- 1/32	5- 9/16	6- 1/32	5- 9/16	6- 1/32	5- 7/16	6- 5/64	5- 7/16	6- 1/32	5- 5/16	6- 1/32	5-1/4	6- 5/32		
61	5-3/4	6- 5/32	5-11/16	6- 5/32	5-11/16	6- 7/32	5-11/16	6- 7/32	5-11/16	6- 7/32	5- 9/16	6-13/64	5- 9/16	6- 7/32	5- 7/16	6- 7/32	5-3/8	6- 9/32		
62	5-7/8	6- 9/32	5-13/16	6- 9/32	5-13/16	6-11/32	5-13/16	6-11/32	5-13/16	6-11/32	5-11/16	6-21/64	5-11/16	6-11/32	5- 5/16	6-11/32	5-1/2	6-13/32		
63	6	6-13/32	5-15/16	6-13/32	5-15/16	6-15/32	5-15/16	6-15/32	5-15/16	6-15/32	5-13/16	6-29/64	5-13/16	6-15/32	5-11/16	6-15/32	5-5/8	6-17/32		
64	6-1/8	6-17/32	6- 1/16	6-17/32	6- 1/16	6-19/32	6- 1/16	6-19/32	6- 1/16	6-19/32	5-15/16	6-37/64	5-15/16	6-19/32	5-13/16	6-19/32	5-3/4	6-21/32		
65	6-1/4	6-21/32	6- 3/16	6-21/32	6- 3/16	6-23/32	6- 3/16	6-23/32	6- 3/16	6-23/32	6- 1/16	6-45/64	6- 1/16	6-23/32	5-15/16	6-23/32	5-7/8	6-25/32		
66	6-3/8	6-25/32	6- 5/16	6-25/32	6- 5/16	6-27/32	6- 5/16	6-27/32	6- 5/16	6-27/32	6- 3/16	6-53/64	6- 3/16	6-27/32	6- 1/16	6-27/32	6	6-29/32		
67	6-1/2	6-29/32	6- 7/16	6-29/32	6- 7/16	6-31/32	6- 7/16	6-31/32	6- 7/16	6-31/32	6- 5/16	6-61/64	6- 5/16	6-31/32	6- 5/16	6-31/32	6-1/8	7- 1/32		
70	6-5/8	7- 1/32	6- 9/16	7- 1/32	6- 9/16	7- 1/32	6- 9/16	7- 1/32	6- 9/16	7- 1/32	6- 7/16	7- 5/64	6- 7/16	7- 1/32	6- 5/16	7- 1/32	6-1/4	7-		

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NOTE: This drawing was approved by joint action of the Air Force and Navy Departments as the Air Force-Navy standard for this product. This drawing supersedes all antecedent standard drawings for the same product and shall be made effective for the procurement of aeronautical supplies, or for use in new designs, not later than 6 months after the latest date of approval above.

APPROVED 15 Jan 43 REVISED 3 4 Apr 55 5 FOR CHANGES SEE SHEET 1 6 4 Aug 82

PROCUREMENT SPECIFICATION

AIR FORCE-NAVY AERONAUTICAL STANDARD

MIL-9-6812

BOLT, EYE

AN42 THRU AN49

SHEET 2 of 2