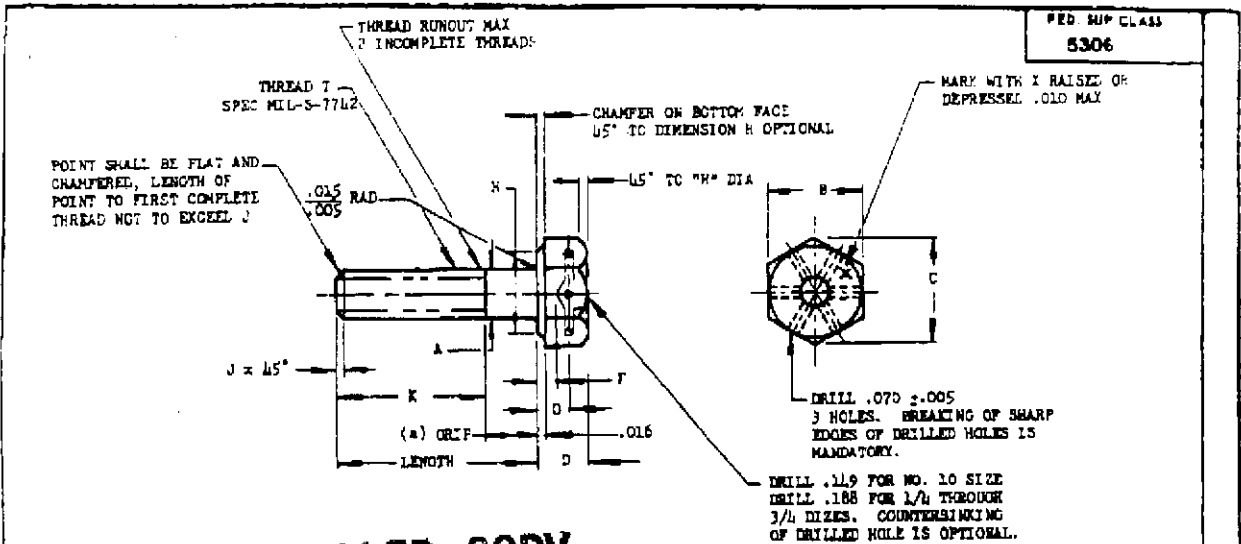


USER ACTIVITIES ARMY - WE



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REVIEWER ACTIVITIES

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SIZE DASH NO.	THREAD T	A DIA		B		(b) C REF	D		P MIN	G ±.000 -.010	R DIA		J		RATED STRENGTH, LBS	
		MAX	MIN	MAX	MIN		MAX	MIN			MAX	MIN	MAX	MIN	TENSION AT ROOT DIA	SHEAR AT FULL DIA
		03-	NO. 10-32 NF-3A	.189	.186		.376	.367			.430	.203	.172	.039	.120	.391
04-	1/4-28 UNF-3A	.219	.216	.439	.430	.510	.234	.203	.052	.144	.454	.422	.047	.015	4 080	3 680
05-	5/16-24 UNF-3A	.312	.309	.501	.492	.580	.297	.266	.078	.172	.516	.484	.063	.031	6 500	5 750
06-	3/8-24 UNF-3A	.374	.371	.564	.554	.650	.297	.266	.078	.172	.579	.547	.063	.031	10 100	8 800
07-	7/16-20 UNF-3A	.437	.433	.689	.679	.790	.344	.313	.078	.172	.704	.672	.063	.031	13 600	11 250
08-	1/2-20 UNF-3A	.499	.495	.751	.741	.870	.391	.359	.094	.193	.766	.734	.063	.031	18 500	14 700
09-	9/16-18 UNF-3A	.562	.558	.875	.865	1.010	.438	.406	.109	.203	.891	.859	.078	.046	23 600	18 700
10-	5/8-18 UNF-3A	.624	.620	.939	.928	1.090	.484	.453	.140	.234	.954	.922	.078	.046	30 100	23 000
12-	3/4-16 UNF-3A	.719	.714	1.064	1.053	1.230	.578	.547	.187	.281	1.079	1.047	.078	.046	44 000	33 150

- (a) 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.
- (b) REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT AN INSPECTION REQUIREMENT.
- (c) MINIMUM YIELD STRENGTH = 76.7 PERCENT OF RATED TENSION.

MATERIAL: STEEL, SEE PROCUREMENT SPECIFICATION.

PLATING: CADMIUM PLATE QQ-P-416, TYPE 2, CLASS 3.

DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ±.010, ANGLES ±5°.

EXAMPLE OF PART NUMBERS: MS20073-05-07 = 5/16-24 UNF-3A BOLT, .375 GRIP, .922 LONG.

UNASSIGNED DASH NUMBERS SHALL NOT BE USED.

THE ACROSS FLAT DIMENSIONS OF THE HEXAGON HEADS ARE IN AGREEMENT WITH AMERICAN-BRITISH-CANADIAN AIR STD 17/2.

INTERCHANGEABILITY RELATION WITH AN73 THROUGH AN81 PARTS: MS20073 ASG) PARTS AND AN73 THROUGH AN81 PARTS OF LIKE THREAD AND GRIP LENGTHS ARE UNIVERSALLY FUNCTIONALLY AND DIMENSIONALLY INTERCHANGEABLE.

THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

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P. A. AF-82 Other Code NAVY - AS ARMY - AV AF - 99	INTERNATIONAL INTEREST STANAG	TITLE BOLT, MACHINE, AIRCRAFT, DRILLED HEAD, FINE THREAD	MILITARY STANDARD MS 20073
PROCUREMENT SPECIFICATION MIL-B-6612	SUPERSEDES: AN73 THRU AN81	SHEET 1 OF 3	

12 APRIL 1984  
REVISED (A) 30 JUL 63  
APPROVED 16 SEP 68

LENGTH DASH NO	-03			-04			-05			-06			-07		
	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)
02	.062	.344	.250												
03	.062	.469	.375	.062	.469	.375									
04	.062	.594	.500	.062	.594	.500	.062	.609	.515						
05	.125	.656	.499	.125	.656	.499	.125	.672	.515	.062	.734	.640			
06	.250	.781	.499	.250	.781	.499	.250	.797	.515	.125	.797	.640	.062	.797	.703
07	.375	.906	.499	.375	.906	.499	.375	.922	.515	.250	.922	.640	.188	.922	.703
10	.500	1.031	.499	.500	1.031	.499	.500	1.047	.515	.375	1.047	.640	.312	1.047	.703
11	.625	1.156	.499	.625	1.156	.499	.625	1.172	.515	.500	1.172	.640	.438	1.172	.703
12	.750	1.281	.499	.750	1.281	.499	.750	1.297	.515	.625	1.297	.640	.562	1.297	.703
13	.875	1.406	.499	.875	1.406	.499	.875	1.422	.515	.750	1.422	.640	.688	1.422	.703
14	1.000	1.531	.499	1.000	1.531	.499	1.000	1.547	.515	.875	1.547	.640	.812	1.547	.703
15	1.125	1.656	.499	1.125	1.656	.499	1.125	1.672	.515	1.000	1.672	.640	.938	1.672	.703
16	1.250	1.781	.499	1.250	1.781	.499	1.250	1.797	.515	1.125	1.797	.640	1.062	1.797	.703
17	1.375	1.906	.499	1.375	1.906	.499	1.375	1.922	.515	1.250	1.922	.640	1.188	1.922	.703
20	1.500	2.031	.499	1.500	2.031	.499	1.500	2.047	.515	1.375	2.047	.640	1.312	2.047	.703
21	1.625	2.156	.499	1.625	2.156	.499	1.625	2.172	.515	1.500	2.172	.640	1.438	2.172	.703
22	1.750	2.281	.499	1.750	2.281	.499	1.750	2.297	.515	1.625	2.297	.640	1.562	2.297	.703
23	1.875	2.406	.499	1.875	2.406	.499	1.875	2.422	.515	1.750	2.422	.640	1.688	2.422	.703
24	2.000	2.531	.499	2.000	2.531	.499	2.000	2.547	.515	1.875	2.547	.640	1.812	2.547	.703
25	2.125	2.656	.499	2.125	2.656	.499	2.125	2.672	.515	2.000	2.672	.640	1.938	2.672	.703
26	2.250	2.781	.499	2.250	2.781	.499	2.250	2.797	.515	2.125	2.797	.640	2.062	2.797	.703
27	2.375	2.906	.499	2.375	2.906	.499	2.375	2.922	.515	2.250	2.922	.640	2.188	2.922	.703
30	2.500	3.031	.499	2.500	3.031	.499	2.500	3.047	.515	2.375	3.047	.640	2.312	3.047	.703
31	2.625	3.156	.499	2.625	3.156	.499	2.625	3.172	.515	2.500	3.172	.640	2.438	3.172	.703
32	2.750	3.281	.499	2.750	3.281	.499	2.750	3.297	.515	2.625	3.297	.640	2.562	3.297	.703
33	2.875	3.406	.499	2.875	3.406	.499	2.875	3.422	.515	2.750	3.422	.640	2.688	3.422	.703
34	3.000	3.531	.499	3.000	3.531	.499	3.000	3.547	.515	2.875	3.547	.640	2.812	3.547	.703
35	3.125	3.656	.499	3.125	3.656	.499	3.125	3.672	.515	3.000	3.672	.640	2.938	3.672	.703
36	3.250	3.781	.499	3.250	3.781	.499	3.250	3.797	.515	3.125	3.797	.640	3.062	3.797	.703
37	3.375	3.906	.499	3.375	3.906	.499	3.375	3.922	.515	3.250	3.922	.640	3.188	3.922	.703
40	3.500	4.031	.499	3.500	4.031	.499	3.500	4.047	.515	3.375	4.047	.640	3.312	4.047	.703
41	3.625	4.156	.499	3.625	4.156	.499	3.625	4.172	.515	3.500	4.172	.640	3.438	4.172	.703
42	3.750	4.281	.499	3.750	4.281	.499	3.750	4.297	.515	3.625	4.297	.640	3.562	4.297	.703
43	3.875	4.406	.499	3.875	4.406	.499	3.875	4.422	.515	3.750	4.422	.640	3.688	4.422	.703
44	4.000	4.531	.499	4.000	4.531	.499	4.000	4.547	.515	3.875	4.547	.640	3.812	4.547	.703
45	4.125	4.656	.499	4.125	4.656	.499	4.125	4.672	.515	4.000	4.672	.640	3.938	4.672	.703
46	4.250	4.781	.499	4.250	4.781	.499	4.250	4.797	.515	4.125	4.797	.640	4.062	4.797	.703
47	4.375	4.906	.499	4.375	4.906	.499	4.375	4.922	.515	4.250	4.922	.640	4.188	4.922	.703
50	4.500	5.031	.499	4.500	5.031	.499	4.500	5.047	.515	4.375	5.047	.640	4.312	5.047	.703
51	4.625	5.156	.499	4.625	5.156	.499	4.625	5.172	.515	4.500	5.172	.640	4.438	5.172	.703
52	4.750	5.281	.499	4.750	5.281	.499	4.750	5.297	.515	4.625	5.297	.640	4.562	5.297	.703
53	4.875	5.406	.499	4.875	5.406	.499	4.875	5.422	.515	4.750	5.422	.640	4.688	5.422	.703
54	5.000	5.531	.499	5.000	5.531	.499	5.000	5.547	.515	4.875	5.547	.640	4.812	5.547	.703
55	5.125	5.656	.499	5.125	5.656	.499	5.125	5.672	.515	5.000	5.672	.640	4.938	5.672	.703
56	5.250	5.781	.499	5.250	5.781	.499	5.250	5.797	.515	5.125	5.797	.640	5.062	5.797	.703
57	5.375	5.906	.499	5.375	5.906	.499	5.375	5.922	.515	5.250	5.922	.640	5.188	5.922	.703
60	5.500	6.031	.499	5.500	6.031	.499	5.500	6.047	.515	5.375	6.047	.640	5.312	6.047	.703

USER ACTIVITIES: ARMY-ME

REVIEWER ACTIVITIES

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CUSTODIANS AF-82 NAVY-AS ARMY-AV AF-99	STANAG	<b>MILITARY STANDARD</b>		<b>MS20073</b>
		BOLT, MACHINE, AIRCRAFT, DRILLED HEAD, FINE THREAD		
PROCUREMENT SPECIFICATION MIL-STD-883C	SUPERSEDES: AN73 THRU AN81			SHEET 2 OF 3

REVISED 16 SEP 53

USER ACTIVITIES ARMY - ME

REVIEWER ACTIVITIES

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LENGTH DASH NO.	-06			-09			-10			-12		
	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)	GRIP ±.016	LENGTH +.031 -.016	K REF (MIN)
10	.250	1.047	.765									
11	.375	1.172	.765									
12	.500	1.297	.765	.438	1.312	.842						
13	.625	1.422	.765	.562	1.438	.842						
14	.750	1.547	.765	.688	1.562	.842	.562	1.562	.968			
15	.875	1.672	.765	.812	1.688	.842	.688	1.688	.968			
16	1.000	1.797	.765	.938	1.812	.842	.812	1.812	.968	.750	1.812	1.030
17	1.125	1.922	.765	1.062	1.938	.842	.938	1.938	.968	.875	1.938	1.030
20	1.250	2.047	.765	1.188	2.062	.842	1.062	2.062	.968	1.000	2.062	1.030
21	1.375	2.172	.765	1.312	2.188	.842	1.188	2.188	.968	1.125	2.188	1.030
22	1.500	2.297	.765	1.438	2.312	.842	1.312	2.312	.968	1.250	2.312	1.030
23	1.625	2.422	.765	1.562	2.438	.842	1.438	2.438	.968	1.375	2.438	1.030
24	1.750	2.547	.765	1.688	2.562	.842	1.562	2.562	.968	1.500	2.562	1.030
25	1.875	2.672	.765	1.812	2.688	.842	1.688	2.688	.968	1.675	2.688	1.030
26	2.000	2.797	.765	1.938	2.812	.842	1.812	2.812	.968	1.750	2.812	1.030
27	2.125	2.922	.765	2.062	2.938	.842	1.938	2.938	.968	1.875	2.938	1.030
30	2.250	3.047	.765	2.188	3.062	.842	2.062	3.062	.968	2.000	3.062	1.030
31	2.375	3.172	.765	2.312	3.188	.842	2.188	3.188	.968	2.125	3.188	1.030
32	2.500	3.297	.765	2.438	3.312	.842	2.312	3.312	.968	2.250	3.312	1.030
33	2.625	3.422	.765	2.562	3.438	.842	2.438	3.438	.968	2.375	3.438	1.030
34	2.750	3.547	.765	2.688	3.562	.842	2.562	3.562	.968	2.500	3.562	1.030
35	2.875	3.672	.765	2.812	3.688	.842	2.688	3.688	.968	2.625	3.688	1.030
36	3.000	3.797	.765	2.938	3.812	.842	2.812	3.812	.968	2.750	3.812	1.030
37	3.125	3.922	.765	3.062	3.938	.842	2.938	3.938	.968	2.875	3.938	1.030
40	3.250	4.047	.765	3.188	4.062	.842	3.062	4.062	.968	3.000	4.062	1.030
41	3.375	4.172	.765	3.312	4.188	.842	3.188	4.188	.968	3.125	4.188	1.030
42	3.500	4.297	.765	3.438	4.312	.842	3.312	4.312	.968	3.250	4.312	1.030
43	3.625	4.422	.765	3.562	4.438	.842	3.438	4.438	.968	3.375	4.438	1.030
44	3.750	4.547	.765	3.688	4.562	.842	3.562	4.562	.968	3.500	4.562	1.030
45	3.875	4.672	.765	3.812	4.688	.842	3.688	4.688	.968	3.625	4.688	1.030
46	4.000	4.797	.765	3.938	4.812	.842	3.812	4.812	.968	3.750	4.812	1.030
47	4.125	4.922	.765	4.062	4.938	.842	3.938	4.938	.968	3.875	4.938	1.030
50	4.250	5.047	.765	4.188	5.062	.842	4.062	5.062	.968	4.000	5.062	1.030
51	4.375	5.172	.765	4.312	5.188	.842	4.188	5.188	.968	4.125	5.188	1.030
52	4.500	5.297	.765	4.438	5.312	.842	4.312	5.312	.968	4.250	5.312	1.030
53	4.625	5.422	.765	4.562	5.438	.842	4.438	5.438	.968	4.375	5.438	1.030
54	4.750	5.547	.765	4.688	5.562	.842	4.562	5.562	.968	4.500	5.562	1.030
55	4.875	5.672	.765	4.812	5.688	.842	4.688	5.688	.968	4.625	5.688	1.030
56	5.000	5.797	.765	4.938	5.812	.842	4.812	5.812	.968	4.750	5.812	1.030
57	5.125	5.922	.765	5.062	5.938	.842	4.938	5.938	.968	4.875	5.938	1.030
60	5.250	6.047	.765	5.188	6.062	.842	5.062	6.062	.968	5.000	6.062	1.030

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CUSTODIANS AF - 82 NAVY - AS ARMY - AV AF - 59	STANAG	<b>MILITARY STANDARD</b>		<b>MS20073</b>
		BOLT, MACHINE, AIRCRAFT, DRILLED HEAD, FINE THREAD		
PROCUREMENT SPECIFICATION MIL-B-6813	SUPERSEDES: AN73 THRU AN81	SHEET 3		OF 3

DD FORM 577  
1-67

PROJECT 5306-0913

APPROVED 15 Sep 55 REVISED (B) FOR CHANGES SEE SHEETS 1, 2, & 3.