Vendor:		Auditor:	Date:	
1.	Routine Schedul	ed Audit		
	a.	Annual		
	b.	Semi-annual		
	с.	Other		
2.	Product driven A	Audit		
	a.	Product received by the Prime Vendor the	hat does not meet specification requirements.	
	b.	Product that was installed or was being i	installed the does not meet specification requirements.	
	с.	Product has failed in service and investig	gations show it did not meet specification requirements	. 📋
What sj	pecification is the	Audit being performed to?		
3.	Governing Spec	ification: Mark the appropriate specification	on	
	a.	MIL-STD-2132		
	b.	NAVSEA 250-1500-01 (Welds)		
	с.	MIL-STD-271 (F)		
	d.	T9074-AS-GIB-010/271 ACN1		
	e.	T9074-AS-GIB-010/271 Revision 1		
	f.	Other		
4.	Program Type: 1	Mark the appropriate program type		
	a.	Level I / SubSafe		
	b.	Nuclear Plant Material		
	с.	Fly by Wire Ships Control System		
	d.	Navy Propulsion Program		
	e.	Naval Nuclear Propulsion Program		
	I.	Aircraft Lounch and Recovery		
	g. h	Other		
	11.			
5.	Does the vendor	have an NDT Examiner?		
	a.	In house		
	D.	Contracted		
	c.	Available for the Audit		
	u.	No Examiner		
6.	Is the NDT inspe	ection program administration code or spe	cification complaint?	
	a.	Level III Approved written practice		
	b.	Approved procedures		
		i. Level III		
		11. Prime contractor		
		iv Clearly specifies acceptance or	iteria	
		v. Oualified to find known defects	s	

	с.	Approved technique sheet	
		i. Level III	
		ii. Prime contractor	
		iii. Clearly specifies inspection requirements	
		iv. Clearly specifies acceptance criteria	
	d.	Approved technical work documents	
		i. Level III	
		ii. Prime contractor	
		iii. Clearly specifies inspection requirements	
		iv. Clearly specifies acceptance criteria	
	e.	Inspector records	
		i. Is there a current eye examination	
		ii. Certifications are current	
		iii. Previous certifications included	
		iv. Educational history	
	f.	Workmanship standards	
		i. Available	
		ii. Controlled	
7	Ano motorial con	steels in place?	
7.	Are material col	Segregated (Level L Subsefa, etc.)	
	a. b		
	0. C		
	d.	Procedure for disposition	
8.	Are records mai	ntained to confirm that all required inspection processes were performed?	
	a.	Description and unique identification of item being inspected	
	b.	Approved procedure identification	
	с.	Acceptance standard used	
	d.	Date of inspection	
	e.	Signatures of inspectors	
	f.	Disposition (accept / reject) of the item inspected	
	g.	Retention (Where and how long)	
9	1 Techni	cal Concerns: List the technical concerns associated with the method	
2.	a.	<u>Pre-Weld Fit-up and Dimensional</u> : Pre-weld dimensions and fit-up attributes should be verified when	
		applicable.	
	b.	Weld Contour (as welded or ground): An improper weld contour can have a detrimental effect on the	
		integrity of the weld joint and higher level NDT methods such as MT, PT, UT and RT.	
	с.	Weld size (minimum and maximum): Specified weld sizes are based upon engineering, design and service	
		requirements. Weld size verification is an important attribute to ensure the engineered strength weld and	
		component can meet its intended purpose.	
	d.	Acceptance Criteria: Acceptance criteria can vary depending on joint design, weld classification and	
		higher level NDT requirements (PT, MT, UT, RT). Inspection procedure and Acceptance criteria should be	
		available to inspector at workstation	
	e.	Inadequate Process Controls: Thorough and technically comprehensive VT procedures ensure the	
	inspector has adequate and detailed direction to evaluate any weld or applicable surface.		

		f.	Inadequate Technique: Inspector technique and methodology when especially measuring and dimensional verification of weld size and use of lighting is an important and helpful component of the inspect discontinuities. Shadow formation caused by ridges and crevices are with proper flashlight angulation.	performing visual weld inspection, discontinuity size, are critical. Proper ion to enhance identification of surface e more readily visible and identifiable	
10.	Known	Process 1	Problems: List the known process problems		
		a.	Required inspection tools available		
		b.	Inspection tools calibrated (when required)		
		c.	Is the lighting adequate (is there a procedure requirement?)		
Checkl	Checklist Instructions: Be specific and ask follow-up questions as appropriate. a. Any condition that is considered to be non-compliant must be specifically documented as to what the deficiency is. i. Specification ii. Page iii. Paragraph iv. Detailed description of what was observed 				
	b.	Docume matter i	ent comments or observations on the checklist at each checkpoint or t f the checkpoint is satisfactory or unsatisfactory.	he comment section, as needed, no	
	c.	Comme	nts on any checkpoint may be positive, as well as negative.		
	d.	If it is o Improve	bserved that an attribute requires additional attention but does not invenent (NI) column and provide a recommendation in the comments a	validate the inspection, mark the Needs rea.	
<u>Reviev</u> site.	v all findi	ings with	the vendor to be sure there is no confusion as to what the finding	s are before you leave the vendor	
	Inspecto	or Name:			
	Procedure: VPAR Approval:			VPAR Approval:	
	i uit onu	ininiou.			
Admin	istrative	Attribut	es		
1.	Is the in	nspector c	ertified in the technique in which they are being audited?	Sat Unsat NI N/A	
2.	Is the in	nspector e	ye exam J1?	Sat Unsat NI N/A	

3.	Is vision correction required? (Verify) Was vision correction worn during inspection?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
4.	If required, can the inspector distinguish the colors used in the method during inspection? (Colorblind)	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
5.	Is the PT procedure qualified, and approved/signed by the Examiner? Is the revision used current?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
6.	Does the procedure qualification prove that discontinuities of a size near the threshold of acceptance/rejection can be reliably detected and evaluated?"	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
7.	Is the procedure qualification maintained on file?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
8.	Does the procedure qualification test the extremities of the limits of the procedure (i.e., min/max temp, min/max time limits, etc.)?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
9.	Is the procedure qualified including NAVSEA high temp. approval if >150f?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
10.	Is there a statement that method A cannot be used for welds and method C for threaded surfaces? T-271	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
11.	Does the procedure contain the minimum requirements of T-271 Para 5.4.2, 5.4.3., 2132 App.C or D, 250-1500?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
12.	If the procedure differs from appendix C and D of 2132 is it approved?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
13.	Is the brand of materials used the same as stated in the procedure and of the same manufacturer?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
14.	Are the material batches current? Are certifications of all batches maintained and producible? MS 2132 para 7.1.	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
15.	Are materials in accordance with AMS-2644 or Mil-I 25135 and listed in QPL-AMS-2644 (271)?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
16.	If materials are transferred to other containers are they traceable to the original batch number?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
17.	Is PT performed before UT, If UT was performed prior to PT was an approved cleaning method used?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌

18.	Is PT performed in the final surface and heat treat condition and is the surface free of any extraneous material that could interfere with the test (I,e. slag, spatter etc.)?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
19.	Peening, shot or sand and vapor blasting is prohibited prior to PT. For 271 tumbling and 271, 2132, 250-1500 power wire brushing is also prohibited. Was the surface treated with any of the prohibited methods?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
Process	S		
20.	Is the weld and the applicable area on either side of the weld cleaned and dried (evaporated) to the applicable specification requirements?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
21.	If an alternate cleaner was used (T-271), has it been qualified and documented by the Examiner?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
22.	Is the temperature of the part and material within the range of the applicable specification?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
23.	For the immersion application of penetrant, is the part dipped into the penetrant and then removed and allowed to drain from the part for the duration of the dwell time? The part should not be kept immersed in the penetrant.	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
24.	Is the penetrant thoroughly applied to the inspection area including the applicable area on either side of the weld? Was the area kept wetted during penetration time? No beading or separation.	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
25.	Was the correct penetration time observed? Was the inspection item controlled during penetration time? (No contamination of the item, inspector leaving the item unattended etc.)	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
26.	(2132)Maintenance of reusable penetrants. Are materials tested in accordance with a written procedure with the frequency and method per mfg.'s recommendation to assure sensitivity is maintained?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
Penetra	ant Removal Method C, Group 1, and VII		
27.	Is the area first cleaned with a dry cloth or absorbent paper? Can the surface be cleaned adequately without the use of cleaner/remover? If not, is the area wiped with a clean dampened cloth or absorbent paper?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
28.	Was the cleaning process compliant to spec./procedure?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
29.	Flushing of the item with any liquid after application of penetrant is prohibited. Was the item flushed with liquid?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌

Method A, Grp III, IV				
30.	Is the penetrant removed using a clean, lint free cloth saturated with clear water or spraying with water not exceeding 40 PSIG and 120F?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
31.	Was the item over/under washed?, If Type 1 penetrant was used, was the cleanliness verified with a blacklight? Blacklight calibration not required at wash station.	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
32.	Are the temperature and pressure gages calibrated and relevant to the process? i.e. a 0-1000 PSI gage for water pressure would not give an accurate reading at 40 PSI. Review Calibration certificates	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
33.	The gages should be in a location that the person washing the parts can see if the pressure or temperature exceeds the requirements. Are they located in an appropriate location?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
Applic	ation and dwell time of emulsifier. Method B, D, Group II, V, VI			
34.	Emulsifier shall be applied per manufacturer instruction and the activities PT procedure. (271). Was the application compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
35.	There is no dwell requirement in 271 but mfg. instructions for Magnaflux lipophilic and hydrophilic emulsifier is 30 to 180 seconds. Emulsification time is extremely critical for detection of indications. Verify with mfg. of product used. Are the times observed compliant with the procedure /technique document?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
36.	There are no concentration requirements but for example, 1-5% for spray applications and 20% for immersion applications is recommended by Magnaflux. Are the concentration requirements of the mfg. adhered to?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
37.	Are the above items a part of procedure qualification?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
38.	Emulsifier shall be applied by dipping or spraying. Emulsification dwell time shall not be greater than 30 seconds. (2132) Is the dwell time compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
Removal of emulsifier. Method B. D. Group II. V. VI				
39.	Emulsifier shall be removed by a water spray not exceeding 40PSI and 120F. T-271 allows removal using mfg. specified cleaner. Was the removal compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	
40.	Was the item over/under washed?, If Type 1 penetrant was used, was the cleanliness verified with a blacklight? Blacklight calibration not required at wash station.	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌	

Drving Method C. Grp. 1 and VII			
41.	Drying shall be accomplished by normal evaporation or by blotting with paper or a clean lint free cloth. Was the drying method compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
42.	Did surface drying after removal of excess penetrant prior to application exceed 10 minutes?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
Drying 43.	Method A,B,D II to VI 271 Drying shall be accomplished by normal evaporation, or by blotting with paper or a clean lint free cloth, or hot air circulating ovens with a max. temp of 160F or circulating air. Drying time per manufacturer instructions. Was the drying method compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
44.	2132 Drying shall be accomplished by circulating air, normal evaporation, or by blotting with paper or a clean lint free cloth. Was the drying method compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
45.	250-1500 Drying shall be accomplished by normal evaporation, or by blotting with paper or a clean lint free cloth. Circulating air other than normal ventilation shall not be used unless shown to be acceptable by objective testing. Was the drying method compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
46.	No contaminating material may be introduced to the surface that may cause mis- interpretation during inspection. Was any contaminated material introduced to the surface?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
47.	Was the item removed from the dryer as soon as it was dry?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
Dovola	nor Application		
48.	Only non-aqueous wet developer is allowed for Method C and 250-1500. 2132 Only non-aqueous wet developer is allowed unless otherwise approved. Examination shall be within 7-30 minutes after the developer has dried. Was the developer application compliant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
49.	250-1500, 2132 A brush or similar applicator can be used for developer application if qualified. If used, is the use qualified?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
50.	Was the developer agitated?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌

51.	Was the developer applied in a uniform thin coating?		
		Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
52.	Were there evidence of pooling or globs of developer from inadequate agitation?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
53.	271 Was the dry powder applied to dry surfaces? Was a thin uniform dusty appearance evident?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
54.	Was inspection performed within 10-30 minutes after application of dry developer and 7-30 minutes for NAWD?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
55.	2132 Dry developer is prohibited on visible dye materials. When approved for fluorescent dye, is the powder applied on dry surfaces and time kept to a minimum?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
Lightir	ng	1	
56.	271 Was adequate lighting used for inspection?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
57.	271 R1 If LED light is used, is the light specifically approved by the examiner or the examiner's designated representative?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
58.	2132, 250-1500 Was 50 fc of light available at the inspection surface? How is this controlled/verified?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
59.	2132 Do areas of limited access have sufficient light to the satisfaction of the examiner? See 3.2.2 for definition	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
60.	For battery powered LED black lights does the procedure include a process to ensure the depleting battery life does not result in unacceptable black light intensity during inspection?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
61.	For fluorescent, is the minimum light at the test surface 800 microwatts per centimeter squared? 2132,271	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
62.	For LED black lights that do not require a 5-minute warm up, has the examiner approved and documented an alternative warm up time in the procedure?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
63.	Is the intensity checked after a 5 minute warm up?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌
64.	Is the check performed daily or when the bulb has been changed?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌

Inspect	ion				
65.	271 Fluorescent PT. Was the inspection performed in a darkened area?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		
66.	250-1500 Are tools used to measure indications accurate within 1/64"? Verify calibration	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		
67.	Is the inspection area clean and free of matter which may interfere with inspection?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		
68.	Does the inspector have the procedure, technique and acceptance standards?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		
69.	Are indications properly classified, interpreted, and dispositioned in accordance with applicable acceptance standards?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		
70.	Are relevancy checks performed correctly and documented in accordance with the applicable spec?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		
71.	271 Are all indications in weld craters considered relevant?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		
Record	s				
72.	Description/ID of piece being examined				
73.	Procedure and acceptance standard				
74.	Material manufacturer and type ID				
75.	Date of inspection				
76.	Signature of inspector:				
77.	Disposition				
Cleaning					
78,	Are penetrant materials cleaned immediately after in accordance with applicable specification?	Sat 🗌	Unsat 🗌 NI 🗌 N/A 🗌		

	79.	If the supplier's Level III Examiner is present, did the Level III Examiner exhibit		
		excessive coaching or provide unreasonable assistance? Did examiner provide a debrief	Sat 🗌	Unsat NI N/A
		on inspectors performance? If no indications are available for disposition did the		
		Examiner give a hypothetical indication to evaluate?		
L				

Concerns/Comments