



### Recommended Evaluation Data Excerpt from NVIC 04-08

**Purpose:** This document is an excerpt from the Medical and Physical Evaluations Guidelines for Merchant Mariner Credentials, contained in enclosure 3 of NVIC 04-08. It addresses evaluation data for specific heart conditions that *may* be requested upon evaluation of the physical examination report (CG-719K).

<b>HEART</b>	
52 Symptomatic Bradycardia (<50 bpm)	Exercise rhythm strip. If unable to achieve HR >100 BPM or double resting HR then GXT and 24-hour Holter monitor are required. Note: <u>GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
53 Left Bundle Branch Block	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. Note: <u>GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
54 Acquired Right Bundle Branch Block	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. Note: <u>GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
55 Implanted Pacemaker	Cardiology consultation, PA and lateral CXR, GXT, echocardiogram, and exercise radionuclide scan. Detailed reports of surgical procedures as well as cerebral and coronary arteriography and other major diagnostic studies are of prime importance; evaluation of pacemaker function to include description and documentation of underlying rate and rhythm with the pacer disabled or at its lowest setting, programmed pacemaker parameters, surveillance record, and exclusion of myopotential inhibition and pacemaker induced hypotension, powerpack data including beginning of life (BOL) and elective replacement indicator/end of life (ERI/EOL). Note: <u>GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>



56	Premature Atrial Contractions	If PAC frequency of occurrence is > 10 of any 50 beats, 10% of any one hour, or 1% of 24 hours of monitoring, or applicant is symptomatic cardiology consultation, 24-hour Holter monitor, echocardiogram, and GXT are required. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
57	Premature Ventricular Contractions	If PVC frequency of occurrence is > 10 of any 50 beats, 10% of any one hour, or 1% of 24 hours of monitoring, or applicant is symptomatic cardiology consultation, 24-hour Holter monitor, echocardiogram, and GXT are required. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
58	2nd Degree AV Block Mobitz I	Cardiology consultation, PA and lateral CXR, GXT, and exercise radionuclide scan. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
59	2nd Degree AV Block Mobitz II	Cardiology consultation, PA and lateral CXR, GXT, and exercise radionuclide scan. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
60	3rd Degree AV Block	Cardiology consultation, PA and lateral CXR, GXT, and exercise radionuclide scan. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>



61	Preexcitation Syndrome	Cardiology consultation, 24-hour Holter monitor, GXT and echocardiogram. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
62	History of Radio Frequency Ablation	3-month wait, then cardiology consultation, 24-hour Holter monitor, GXT and echocardiogram. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
63	History of Supraventricular Tachycardia (3 or more consecutive non-ventricular ectopic beats)	Cardiology consultation, 24-hour Holter monitor, GXT, TFTs, and echocardiogram. If evidence of abnormalities exercise radionuclide scan and cardiac catheterization are required and surgical/ablative procedure reports if performed. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
64	History of syncope, greater than one episode, within the last 5 years	Cardiology consultation, neurology consultation, 24-hour Holter; bilateral carotid US.
65	History of Atrial Fibrillation within the last 5 years	Document previous workup for CAD and structural heart disease, to include cardiology consultation addressing use of anticoagulants and functional capacity, 24-hour Holter monitor, GXT and echocardiogram. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
66	Chronic Atrial Fibrillation	Cardiology consultation addressing use of anticoagulants and functional capacity, 24-hour Holter monitor, GXT and echocardiogram. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
67	Paroxysmal/Lone Atrial Fibrillation	Cardiology consultation addressing use of anticoagulants and functional capacity, 24-hour Holter monitor, GXT and echocardiogram. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>



68	History of Angina Pectoris	Cardiology consultation, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test no sooner than 6-months post event.
69	History of Myocardial Infarction	Cardiology consultation, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test no sooner than 1 month post event. <u>Note: Acceptable treatment of applicants includes all Food and Drug Administration approved diuretics, alpha-adrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators. Centrally acting agents (e.g. reserpine, guanethidine, guanadrel, guanabenz, and methyldopa) are usually not acceptable. The use of flecainide is unacceptable when there is evidence of left ventricular dysfunction or recent myocardial infarction.</u>
70	History of Atherectomy; CABG; PTCA; Rotoblation; or stent	Cardiology consultation, hospital admission summaries if applicable, coronary catheterization report, statement of functional capacity, blood chemistries, including total cholesterol, HDL, LDL, and triglycerides, echocardiogram with Doppler flow study, maximal myocardial perfusion exercise stress test no sooner than 1 month post event, 6 months for CABG.
71	Hypertension, systolic BP > 160 or diastolic BP > 100, with or without medication	ECG, serum chemistries, lipid profile, UA, documentation of family history of CAD, DM, hypertension, CVA, hyperlipidemia, and renal disease. <u>Note: An initial reading exceeding 160/100 should be confirmed by three blood pressure readings separated by at least 24 hours each.</u> <u>Acceptable treatment of applicants includes all Food and Drug Administration approved diuretics, alpha-adrenergic blocking agents, beta-adrenergic blocking agents, calcium channel blocking agents, angiotension converting enzyme (ACE inhibitors) agents, and direct vasodilators. Centrally acting agents (e.g. reserpine, guanethidine, guanadrel, guanabenz, and methyldopa) are usually not acceptable.</u>
72	History of Valvular Disease, non-specified	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>
73	Aortic and Mitral Insufficiency	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor. <u>Note: GXT should be Bruce Protocol to at least 8 METS with a functional cardiac stress test. Pharmacologic Stress Tests are not acceptable.</u>



74	History of Valve Replacement	Cardiology consultation addressing cardiac function, evidence of embolic phenomena, arrhythmias, structural abnormalities, or ischemia. GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor, INR values for 6 months prior to application, copy of operative report.
75	History of Valvuloplasty	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study, 24-hour Holter monitor, and copy of operative report.
76	History of Heart Transplant	Generally not waivable. Contact NMC for guidance.
77	Cardiac decompensation or cardiomyopathy	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor.
78	Congenital heart disease accompanied by cardiac enlargement, ECG abnormality, or evidence of inadequate oxygenation	Cardiology consultation addressing cardiac function, evidence of embolic phenomena, arrhythmias, structural abnormalities, or ischemia. GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor.
79	CHF, Hypertrophy or dilatation of the heart	Cardiology consultation, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor.
80	Pericarditis, endocarditis, or myocarditis	Cardiology consultation addressing cardiac function, GXT, 2-D M-mode echocardiogram with Doppler flow study and 24-hour Holter monitor, and documentation of resolution or stability of the condition.
81	Anti-tachycardia devices or implantable defibrillators	Generally not waivable. Contact NMC for guidance.