CHECKLIST: MAINTAINABILITY				
CRITERIA	YES	NO	N/A	COMMENTS
1. Are plug-in components used where feasible?				
2. Is wrong installation of unit prevented by virtue of size, shape or configuration?				
3. Are modules and mounting plates labeled?				
4. Are guides used for module installation?				
5. Are means provided for pulling out drawers and slide-out racks without breaking electrical connections when internal in-service adjustments are required?				
6. Are units and assemblies mounted so that replacing one does not require removal of others?				
7. Are parts mounted on a single plane, not stacked one on another?				
8. Are parts mounted on one side of a surface with associated wiring on the other side?				
9. Are easily damaged components mounted or guarded so they will be protected?				
10. Are all replaceable parts accessible by fold-out construction or other special techniques when necessary?				
11. When foldout construction is employed, are parts and wiring positioned to prevent damage by opening and closing?				
12. Are braces provided to hold hinged assemblies in the "out" position while being worked on?				
13. Are parts which retain heat or electrical potential after the equipment is turned off located so that the technician is not likely to touch them while replacing commonly malfunctioning parts?				
14. When screwdriver adjustments must be made by touch, are screws mounted vertically so that the screwdriver will not fall out of the slot?				
15. When necessary, are internal displays illuminated?				
16. Are internal controls (switches, adjustment screws) located away from dangerous voltages?				
17. Are screwdriver guides provided on adjustments that are located near high voltages?				
18. Are parts located so that other large parts (such as indicators and magnetron tubes), that are difficult to remove, do not block access to them?				
19. Are parts, assemblies, and components placed so there is sufficient space to use test probes, soldering irons, and other tools without difficulty?				
20. Are parts, assemblies, and components placed so that structural members of units do not prevent access to them?				
21. Are all throwaway items made accessible without removal of other items?				
22. Are units designed so that it is unnecessary to remove an assembly from a major component to troubleshoot that assembly?				
23. Is equipment laid out so the technician will not have to retrace movements during checking routines?				
24. Are all miniature tube sockets oriented with the gaps facing one direction?				
25. When tubes must be replaced through small access openings, is there an external indication of the position for pin insertion?				

CHECKLIST: MAINTAINABILITY				
CRITERIA	**YES**	**NO**	**N/A**	**COMMENTS**
26. Are all fuses located so they can be seen and replaced without removal of any other items?				
27. Are fuse assemblies designed and placed so that tools are not required to replace fuses?				
28. Are removable units removable along a straight or moderately curved line?				
29. Are clearance holes for mounting screws in cover plates and shields oversize to obviate need for perfect alignment?				
30. Are cases designed to be lifted off units rather than units lifted out of cases?				
31. Are cases made larger than units they cover to preclude damage to wires and components?				
32. Are guides or tracks provided to prevent cases cocking to one side?				
33. If the method of opening a cover is not obvious, is an instruction plate attached to the outside of the cover?				
34. When covers are not in place and secure, are means provided to make it obvious?				
35. Are no more than six fasteners used to secure the case?				
36. Are the same type fasteners used for all covers and cases on a given piece of equipment?				
37. Is ventilation-hole screening of small enough mesh provided to prevent entry of probes or conductors that could inadvertently contact high voltages?				
38. When the sealing edges of a case must be slid over sealing material (such as rubber stripping), does the sealing material adhere tightly enough to prevent it from buckling or tearing?				
39. Are cables long enough that each functioning unit can be checked in a convenient place?				
40. Can units that are difficult to connect when installed, be moved to convenient positions for connecting and disconnecting?				
41. Are cable harnesses designed for fabrication in a shop as a unit?				
42. Are all cables color coded and are both ends tagged? Can the selected colors be distinguished?				
43. Are cables and lines directly accessible to the technician wherever possible (not under floorboards or behind panels which are difficult to remove)?				
44. Are cables routed so they need not be bent or unbent sharply when being connected or disconnected?				
45. Are cables routed so closing doors or lids cannot pinch them or so they will not be stepped on or used as handholds by maintenance personnel?				
46. Are cables or lines attached to units that can be partially removed (chassis on slide racks) and attached so units can be replaced conveniently without damaging the cable or interfering with securing the unit?				
47. Is a 75-mm minimum clearance provided wherever possible between control cables and wiring? Has the designer anticipated potential chafing hazards and provided physical means to prevent chafing?				
48. Is electrical wiring routed away from all lines that carry flammable fluids or oxygen?				

CHECKLIST: MAINTAINABILITY				
CRITERIA	**YES**	**NO**	**N/A**	**COMMENTS**
49. Is care taken in design of cable conduits to prevent collection of water or debris that could interfere with operation of a control system (freezing or short-circuiting)?				
50. Is the necessity for removing connectors or splicing lines avoided?				
51. Is direct routing through congested areas avoided wherever possible?				
52. Are cable entrances on the fronts of cabinets avoided where it is apparent they could be "bumped" by passing equipment or personnel?				
53. Are cables flexible in severe cold temperatures?				
54. Are adjacent solder connections far enough apart so work on one connection does not compromise the integrity of adjacent connections?				
55. Are connector plugs designed so that pins cannot be damaged (aligning pins extended beyond electrical pins)?				
56. Are self-locking safety catches rather than safety wire provided on connector plugs?				
57. Are connectors designed so that it is physically impossible to reverse connections or terminals in the same or adjacent circuits?				
58. Is the use of special adapters avoided since these are often lost?				
59. Are electrical connectors protected from possible shorting through contact with external objects?				
60. Are adequate covers provided on electrical connectors to prevent foreign matter from shorting out the connector or causing damage to the connector threads and pins?				
61. Are provisions made to secure the cover to the connector to avoid misplacement during periods of non-use?				
62. Are separate ground connections provided for each voltage regulator so that a single grounding failure does not cause failure of several other systems?				
63. Are quick-disconnect devices used wherever possible to save time and minimize human error (fractional-turn, quick-snap action, and press fit)?				
64. Are unkeyed symmetrical arrangements of aligning pins on connectors avoided?				
65. Are electrical terminals plainly marked +(plus) or -(minus), since the marked caps may be lost?				
66. Do markings on plugs, connectors, and receptacles show proper position of keys for aligning pins for proper insertion position?				
67. Is the use of identical fittings avoided by staggering location, varying lengths, size or shape, or by shape, symbol, or color coding?				
68. On cable-connected removable units, will plug and receptacle disconnect before cable breaks?				
69. Are connectors located for easy accessibility for replacement or repair?				
70. Are U-lugs (spade) used in lieu of O-lugs (ring) where frequent removals are anticipated?				
71. Are auxiliary-equipment connectors used that do not require tools for their operation?				
72. If tools must be used to operate connectors, are only standard tools required?				

CHECKLIST: MAINTAINABILITY				
CRITERIA	**YES**	**NO**	**N/A**	**COMMENTS**
73. Do connectors used to connect test equipment to a test point require not more than one full turn?				
74. Can wires be unsoldered and removed without damaging plugs?				
75. Are test points located on the front panel wherever possible?				
76. Is accessibility of external test points assured under conditions of use?				
77. Are test points grouped for accessibility and convenient sequential arrangement of testing?				
78. Is each test point labeled with name or symbol appropriate to that point?				
79. Is each test point labeled with the in-tolerance signal or limits which should be measured?				
80. Are test points labeled with the designation of what output is available?				
81. Are all test points color-coded with distinctive colors?				
82. Are test points provided in accordance with the system test plan?				
83. Do test-lead connectors require no more than a fraction of a turn to connect?				
84. Are test points located close to controls and displays with which they are associated?				
85. Is the test point used in an adjustment procedure associated with only one adjustment control?				
86. Are means provided for an unambiguous signal indication at a test point when the associated control has been moved?				
87. Are test points located so the technician operating the associated controls can read the signals on the display?				
88. Are test points provided for a direct check of all replaceable parts?				
89. Are fan-out cables in junction boxes used for checking if standard test points are not provided?				
90. Are test points planned for compatibility with the maintenance skill levels and not randomly located?				
91. Are test points coded or cross-referenced with the associated units to indicate the location of faulty circuits?				
92. Are test points provided to reduce the number of steps required (split-half isolation of trouble, automatic self-check sequencing, minimizing of step retracing or multiple concurrent tests)?				
93. Are test points located so as to reduce hunting time (near main access openings, in groups, properly labeled, near primary surface to be observed from working position)?				
94. Are test points which requiring test-probe retention designed so that the technician will not have to hold the probe?				
95. Are built-in test features provided wherever standard portable test equipment cannot be used?				
96. Can the technician gain access to routine check points without removing the unit or module or removing a cover from the cabinet?				
97. Are test points adequately protected, illuminated, and accessible?				
98. Are routine test points available to the technician without removing the chassis from the cabinet?				
99. Are the instructions for using the test equipment in a step-by-step format?				

CHECKLIST: MAINTAINABILITY				
CRITERIA	YES	NO	N/A	COMMENTS
100. Is there a signal which shows when the test equipment is warmed up?				
101. If it is not feasible to present such a signal, is the warm-up time required clearly indicated near the power switch?				
102. Is a simple check provided to indicate when the test equipment is out of calibration or is otherwise not functioning?				
103. Is an appropriate indication of test equipment performance provided so the technician does not attempt to measure with a faulty standard or instrument out of calibration?				
104. Do test equipment displays, which require transformation of values, have conversion tables attached to the equipment with the transform factor by each individual switch position or display scale?				
105. Is adequate support provided for test equipment which must be taken into the work area?				
106. Are built-in test features provided wherever standard portable test equipment cannot be used?				
107. Does portable test equipment weigh under 11.3 kg if it is to be carried by one person?				
108. Do plugs, jacks, and binding posts used for testing test equipment appear on the outer casing of equipment, so it is unnecessary to remove the case? If internal repair requires removal of the case, are duplicate jacks and plugs provided on the chassis so "jury-rig" connections to the case are unnecessary?				
109. Are a display light, automatic power switches, or printed warnings provided to ensure that test equipment is turned off when testing is completed?				
110. Is storage for cables and test leads (within test instrument case lid) designed so the loose cables cannot interfere with closure of the case?				
111. Are the purposes of the test equipment and special cautions displayed in a conspicuous place on the outer surface of the test equipment?				
112. Are units which are not self-checking designed to be checked in the operating condition, without the aid of special rigs and harnesses, wherever possible?				
113. Are selector switches provided in lieu of a number of plug-in connectors?				
114. Are ports labeled with information about components that can be reached through them?				
115. Are labels used to identify test points and preset critical information?				
116. Are labels designed with short and clear messages?				
117. Are uncommon or unfamiliar fasteners labeled to indicate how they should be used?				
118. Are labels used to identify potential hazards and are such labels apparent to the casual observer?				
119. Are all labels placed where they will not be destroyed by dirt, oil, chemicals, or wear?				
120. Are the dimensions of the access ports defined by considering the maintenance tasks, tools, force exerted, and depth of reach?				
121. Are maintenance openings provided to all components?				

CHECKLIST: MAINTAINABILITY				
CRITERIA	**YES**	**NO**	**N/A**	**COMMENTS**
122. Are maintenance openings large enough to permit access by both hands?				
123. Do maintenance openings permit visibility of the components expected to be accessed?				
124. Are maintenance openings designed to avoid exposure to hot surfaces, electrical currents sharp edges, or other hazards?				
125. Are access ports provided such that the maintainers can monitor necessary displays and make appropriate adjustments?				
126. Are access port covers hinged?				
127. Are cover fasteners designed to be easily visible and accessible?				
128. Are cover fasteners designed to be easily operated with a gloved hand?				
129. Are components designed to require a minimum number of turns to remove?				
130. Are all hexagonal bolt screws designed so that they can easily be removed using either a screwdriver, wrench, or power tool?				
131. Are replaceable seals visible?				