

AC and pwr supply
safety issues
AC grounds
house wiring
power line noise
GFI outlets
ground loops

ANTENNAS

UNBAL vs BAL input
modifications to UNBAL jack
specific book and articles
optimal SWL antenna
types in use
the active antenna
Fort Deven's Training Manual
wire and feedline options
computer RFI
role of antenna tuners
antenna relay and its repair
break-in issues
multicouplers and diversity reception
grounding the tower and safety issues
physics of ground rods
lightning strikes and sequelae
CAD welding

AUDIO DECK

diode load usage and connections
squelch circuitry
limiter circuitry and problems
refurbishing the audio deck module
tantalum C609 electrolytic replacement
the 6AQ5 output
the Kleronomos 6922/6360 circuit
600 to 8 ohm transformers
use of a 70.7 volt line transformer
LS-166 and other speaker options

BALLAST TUBE

rationale for its use
physics behind 3TF7 and its cousins
substitutes for the 3FTF7
replacement SS circuits

CAPACITORS

important caps to replace first
problem capacitors in the R390A
Vitamin Q caps
Orange drop caps: pros and cons
minimal vs wholesale replacement practices
how to test a paper capacitor for leakage
polyester vs polypropylene
molded mica, silver mica, and ceramic cap experiences
C275 mis-value
cap removal and replacement practical tips

DEAD UNITS

common causes
work sequences

HISTORY

active duty experiences
Ft Devens R390 classes
serial numbers
SWL targets
EAC and Fowler units
depot *dawgs*
MWO's
R-648
R-1247
Racal RA 17

IF DECK

noise
stuck IF slug
coax shorts
trimmer repair
AGC theory and repair
Rippel on alignment
stagger-tuned IF strip
Q-spoiling resistors
Z-503 repair
E20-E211 test points
bandwidth switch repair
BFO microdial
BFO neutralization
Xtal deck issues
R-725 decks
R-390 deck conversion to 390A chassis
synchronous AM detector

DSP IF

IF DECK FILTERS

alignment of the mechanical filters

testing a mechanical filter

rebuilding a mechanical filter

Clevite ceramic filters

Dave Curry filters

question of a notch filter

trim capacitors

misc R390 & R391

some specific articles

MODS AND FC'S

Production mods

misc users modifications

OT: batteries

PAINTING AND KNOBS

chassis disassembly

metal prep

cleaning chemicals

silk-screening and engraving

paint options and formulae

Bristol wrenches

alodine

powder coating

ID plates

PANADAPTORS

Heath SB-620

BC-1031A

PANEL METERS

specifications

calibration

disassembly

repair

substitutes

carrier pot

radioactivity

back-light

PTO

manufacturers

lubrication
adjusting end-points
adjusting linearity
mechanical alignment
setting over-travel
Oldham coupler alignment
coil modification
failure modes
rebuilding
effects of FC 7
dessicants
Conversion of 390A PTO to a 390
R392 PTO
R388 PTO
R389 PTO

Pwr_Spuuply_C603_C606
F101 line filter
solid state rectifiers
inrush current considerations
CR801 selenium rectifier
microswitch repair
rebuilding C603/6
C603/6 replacements
ovens
fuse holders
use of STDBY
low heater voltages
use of bucking transformers and Variacs
R390/URR voltage regulator
fuses
12BW4 as substitute for 26Z5
physics behind the OA2

R392 & R648 misc notes

RACKS AND CASES

sources
rails
nuts

RESISTORS

carbon vs metal film in the 390A
failure modes
pot cleaning

RESTORATION_GENERAL

buying a R390A
overhaul tips
a hamfest shopping list
reference and parts resources
manufacturers listing
specialty R390A models
the *Blue-Striper*
restoration sequence
restoration techniques
special tools needed
dial lamps: OEM and LED
manual listing
expert restoration resources
mini-BNC connectors and coax
contact cleaners
how to clean chassis and coils
soldering
hardware employed
module swaps
cabinets
clutch and the zero adjust
tube extenders
rack mounting
solid-state the R390A
crystal ovens

RF DECK_ELECTRICAL

deck testing: noise and gain
HR-202 issues
S206 bandswitch tips
sync the bandswitch
ant trimmer tips
RF deck slugs and coil problems
100KC calibrator function
missing components C-252
using the Xtal calibrator
dead below 8MC
low Xtal osc output
the Green Gear
effects of FC 7
break-in function
reception below 500KC
digital frequency readouts
R391 and autotunes

Nuvistaplug possibilities

function of C227

17MC Xtals

roofing filters

digital readouts

RF DECK_MECHANICAL

cleaning the RF deck and gear train

band switch

how to remove this deck

gear train

gear clamp repairs

stuck RF slug

busted RF slug

RF slug coding

lubrication

the Oldham coupler

the Green Gear in R390's

zero adjust

autotune in R390's

Veeder-Root

SENSITIVITY_ALIGNMENT

tutorials

"octave" tuning methodology

Rippel on alignment articles

sensitivity measurements

preselectors

MDS measurements

SINPO explained

sweep gen alignment

aligning the BAL input

generator leakage

using the GR1001A

SSB CONVERSION

Capt Lee article using a 6BE6

Lankford diode method

CV-157 and CV-591A

other outboard add-ones

6U8 addition

Sherwood SE-3

STORAGE_SHIPPING

packing heavy gear

commercial carriers

horror stories
storing stuff at home

TEST GEAR

scopes and their probes
TS 505 and its relatives
Simpson 260's
HP-410 family
DMM's
HP 600 and 8600 family
repairing moving vanes in meters
URM-25D and URM-25F and others
testing Xtals with sig gens
meggers
tube testers
impedance matching
capacitor *analyzer*
spectrum analyzers

TUBES

characteristics
equivalent substitutes
gas and Zippo
IERC shields
in situ performance tests
cleaning a tube socket
tube organizing
gettering old tubes

TUBE SHIELDS AND HEATING

IERC heat issues
effect of cabinets on heat buildup
fans