QUAD VS. YAGI

*WHY **GO FOR A QUAD ANTENNA** RATHER THAN A YAGI?*

BECAUSE:

MORE GAIN
IT HAS BEEN TESTED TIME AND TIME AGAIN OVER THE YEARS THAT A QUAD HAS 2 DB MORE GAIN THAN A YAGI WITH THE SAME LENGTH BOOM AND THE SAME NUMBER OF ELEMENTS.

LIGHTER WEIGHT
QUADS ARE LIGHTER THAN YAGIS WHEN QUADS USE FIBERGLASS SPREADERS.

BETTER FRONT TO BACK RATIO
WITH A PROPERLY TUNED QUAD THE LOBES OFF THE BACK OF THE QUAD CAN BE BROUGHT TO A SMALLER MAGNITUDE THAN IS FOUND IN A PROPERLY TUNED YAGI. WHY DO YOU THINK YAGI SUPPLIERS OFFER REJECTION KITS.? QUADS DON'T NEED REJECTION KITS. REJECTION KITS ADD COST AND ADD EVEN MORE WEIGHT TO YAGIS AND THIS IS NEVER BROUGHT TO CUSTOMERS' ATTENTION.

MUCH BETTER SIDE REJECTION & MUCH BETTER RECEPTION
A QUAD IS DESIGNED SO THAT THE TOP HALF OF THE VERTICAL ELEMENT IS 180 DEGREES OUT OF PHASE WITH THE BOTTOM HALF. THIS CAUSES A COPHASED PATTERN, WHICH ALLOWS MUCH BETTER REJECTION & RECEPTION.

SMALLER TURNING RADIUS
HAVE YOU EVER SEEN A TWO ELEMENT QUAD WITH A GAIN OF 10.6 DBD, WHICH HAS A TURNING RADIUS OF ONLY 7 FT. 3 IN.? WE CAN SHOW YOU ONE. I DOUBT THAT ANY YAGI WITH THIS GAIN CAN COME CLOSE TO IT.

OPERATES EFFICIENTLY AT A LOWER ELEVATION
THE YAGI IS ALWAYS AFFECTED BY ITS PROXIMITY TO THE GROUND AND ITS VSWR WILL CHANGE AS IT IS RAISED AND LOWERED. THE QUAD LOOP ON THE OTHER HAND HAS VERY LOW PROXIMITY IMPEDANCE SO THAT THE HEIGHT ABOVE GROUND DOES NOT CAUSE VARIOUS WAVE FORMS TO BE REFLECTED BACK INTO THE AIR TO GIVE THE ANTENNA A HIGH ANGLE OF RADIATION. THIS IS ALSO WHY THE QUAD WILL BE VERY EFFICIENT AT AN ELEVATION AS LOW AS 35 FT. OR EVEN LOWER. THE QUAD'S LOW ANGLE OF RADIATION MEANS LESS SKIPS TO ANY DISTANT STATION WHICH RESULTS IN A STRONGER SIGNAL ON THE OTHER END WHERE IT COUNTS.

MUCH LESS PRECIPITATION STATIC
THE CLOSED LOOPS OF QUADS ARE NOT SUBJECT TO THE END CAPACITANCE EFFECTS OF YAGI ELEMENTS WHICH MEANS THAT A QUAD WILL NOT PICK UP THE PRECIPITATION STATIC A YAGI DOES IN AREAS OF RAIN OR SNOW. THIS MEANS MANY MORE HOURS OF USE EVERY YEAR.

LOW WIND RESISTANCE OR LOW WIND AREA
EACH ELEMENT IN A QUAD IS ONE FULL ELECTRICAL WAVELENGTH LONG FORMED INTO A LOOP, AS OPPOSED TO A HALF WAVELENGTH FOR THE YAGI. THIS MEANS TWICE AS MUCH RADIATING CONDUCTOR PER QUAD ELEMENT, LESS WEIGHT AGAIN AND MUCH LESS WIND RESISTANCE PER ELEMENT THAN A YAGI. THIS IS WHY A QUAD IS EASIER TO MANEUVER AND REQUIRES LESS SUPPORT AND LESS ROTATOR POWER.

TRY A QUAD!! YOU WILL DEFINITELY AGREE AS DO ALL OTHER QUAD OWNERS WE SPEAK TO.

*ALL PERFORMANCE ADVANTAGES OF A QUAD OVER A YAGI APPLY WHEN IT IS A **TRUE QUAD**. ONLY A **TRUE QUAD** MEANS AN ARRAY OF **ALL-QUAD** ELEMENTS AND NOT A QUAD/YAGI COMBINATION OR QUAGI HYBRID WHICH **IS NOT A TRUE QUAD**.*

***SIGNAL ENGINEERING** DEVELOPED A **FEED SYSTEM** FOR QUADS, WHICH PROVIDES TWO INDEPENDENT, FEED POINTS. ONE PURE **VERTICAL** POLARIZATION, THE OTHER PURE **HORIZONTAL**. TWO COAXIAL LINES THEN RUN TO THE OPERATING POSITION AS USUAL, AND ARE SELECTED BY THE OPERATOR THROUGH A COAX SWITCH. THIS SYSTEM RESULTS IN VERY LOW SWR OVER ALL 40 CHANNELS AND IS EASILY ADJUSTABLE AT **THE POINT WHERE THE ANTENNA MOUNTS TO THE MAST**.*

THE QUAD IS ON TOP WHEN ALL THINGS ARE CONSIDERED
ESPECIALLY ON THE AIR PERFORMANCE. !!

***SIGNAL ENGINEERING** MANUFACTURES **TRUE QUADS BEAMS** WHICH FEATURE 6063 AND 6061 SEAMLESS AIRCRAFT GRADE ALUMINUM BOOM AND SLEEVING, STRONG FIBERGLASS SPREADERS AND 13 GAUGE ENAMEL COATED COPPER ELEMENT WIRE.*

*ALL SE's ANTENNAS COME **IN KIT FORM** WITH CLEAR INSTRUCTIONS FOR QUICK ASSEMBLY.*

*SE DOES NOT EXPECT CUSTOMERS TO MEASURE AND CUT THE VARIOUS ELEMENT LENGTHS, INSTEAD **SE's ELEMENT WIRES ARE ALREADY PRESTRETCHED, PRE-CUT AND COLOR CODED** FOR ACCURATE FREQUENCY OPERATION AND QUICK AND EASY SETUP. STANDARD **CB** (11 METER) OR **HAM** (10 METER) WIRE SETS ARE AVAILABLE.*

SIGNAL ENGINEERING