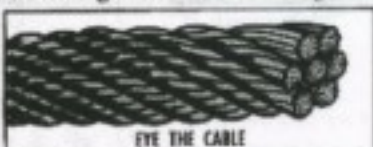




The weak link in a chain, or an aircraft control cable, can upset the appletart. Oh, the cable won't fail sudden-like because it's made up of 7 strands with either 7 or 19 wires in each strand. It's woven together for added strength.

But, one wire will let go—then another. You'll have time to spot broken wires, and save the day, if you eye the control cables as called for in the bird PMI and PMP checksheets.

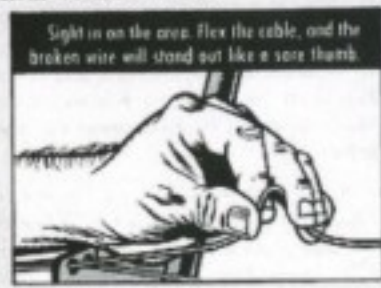


When you eye the cables focus on those places where the cable makes contact with pulleys and fairleads. That's where you'll get cable wear and broken wires.

Even with 20-20 eyesight you can't spot broken wires right-off. And running your hand along the cable will give you a mean cut when you hit a broken wire. So, latch onto a piece of cloth. Cheesecloth works real well.



Run the cloth over the cable and a broken wire will snag the cloth.



Sight in on the area. Flex the cable, and the broken wire will stand out like a sore thumb.

The checksheets usually have the lowdown on how many broken wires are allowed in each strand before the cable has to be changed.

LOCATION	CABLE TYPE	ALLOWABLE BROKEN WIRES PER STRAND
CONUS	7 x 7	2 per inch of strand provided that not more than 3 exist in that inch of cable
OVERSEAS	7 x 7	3 per 1 ft length of cable
COMBAT	7 x 7	2 per 2 ft length of cable
CONUS	7 x 19	3 per inch of strand provided that not more than 6 exist in that inch of cable
OVERSEAS	7 x 19	6 per 1 ft length of cable
COMBAT	7 x 19	6 per 2 ft length of cable
ALL	1 x 19	1 broken wire per length of cable

IF YOUR CHECKSHEETS DON'T HAVE IT, HERE'S A CHART OF STANDARD LIMITS TO GUIDE YOU.



WEAR ALSO COUNTS

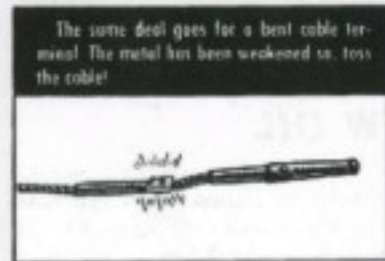
If you have any doubts that a cable is good after your broken-wire count, change the cable. A corroded cable, for example, should get the heave-ho.

Scrap badly worn cables even tho the number of broken wires is within limits. Here're the wear limits.

Any 7 x 7 cable with 3 wires or less per inch worn not more than half way thru the wire diameter, or any 7 x 19 cable having 6 wires or less per inch worn not more than half way thru the wire diameter is OK. No broken wires are allowed in the wear spots.

One less worn wire is allowed for each broken wire in the same inch. It's OK to have more than one wear spot along the cable. But no adjacent wear spot is allowed around the circumference of the cable.

When you come across a kinked, twisted or bird-caged condition that won't straighten out under normal cable tension, change the cable.



The same deal goes for a bent cable terminal. The metal has been weakened so, toss the cable!



Cables are sometimes routed thru fairleads or hard to reach places. Remove all the access covers and strain your neck. Inch by inch, make your check.