The **Losing Trick** count, or LTC, was first introduced by C. Courtenay in 1935 as a better way to assess the **trick-taking** potential of two ***unbalanced*** hands than M. Work's point count could.
To be used **only once an 8 + card Fit has been established**, it consisted of counting losing cards or "losers" in the first 3 cards of every suit as such :
x x x = 3 losers, A x x = 2 losers, K x x = 2 losers, Q x x = 2 losers.
To determine the number of tricks that can be "expected", you deduct the total number of losers held by both partners from 24 (maximum number of losers between two hands) i.e. 7 + 7 = 14, deducted from 24 = 10 tricks.

Even though this count did, in many cases, enable reaching games better than the Goren point count could, this evaluation method was clearly non-sensical and had ***no statistical validity*** as it gave the Ace, the King and the Queen the same value of 1 trick. Not surprisingly, it was generally not adopted ***as is***, without modifications.

40 years later, in 1975, the *Blue Team* Italian champions, B. Garozzo and G. Belladonna, revisited it and presented their "modified" LTC version as part of their super-precision bidding system. J. Koelman further refined it with what is called the "New" LTC which established the *statistically correct* values of the Ace as 1 ½ tricks, the King as 1 trick and the Queen as half a trick. These "New" LTC values are : A x = 1 loser (L), A x x = 1 ½ L, A K x = ½ L, A Q x = 1 L, A Q J = ½ L, K x x = 2 L, K J 10 or K Q x = 1 ½ L, Q x x = 2 ½ L, Q J x = 2 L.

Furthermore, the "New" LTC counts the 4th card of a suit as a **half**-loser, which increases the *maximum* number of losers to 25, vs 24. It also deducts losers for *distribution*, only for support hands with **4** trumps, as follows :
½ a loser for a doubleton, 1 L for a singleton, 1 ½ L for a void.
Examples : On a 1 ♠ opening by partner, you hold :

♠ K Q x	♥ K J 10	♦ x x x	♣ x x x x	= 9 ½ L	Bid : 2 ♠
♠ K x x x	♥ x x	♦ K J x	♣ Q J x x	= 8 L	Bid : 3 ♠
♠ K x x	♥ A Q x x	♦ K Q J x	♣ x x	= 7 L	Bid : 4 ♠

These modifications did represent an improvement over LTC and some world-class and advanced players have since adopted the "New" LTC. However, this **N**ew LTC still does not provide an accurate assessment of a hand's value. The following hand clearly illustrates this :

♠ A K Q J x x x ♥ x x x ♦ x x ♣ x

This hand will make **7** tricks (96 % of the time) in spades, which equate to **19** pts (27 pts for 10 tricks = **2.7** pts per trick x 7 tricks = 19 pts).
But the LTC only accounts for **6** tricks (6 losers from 12 losers = 6 tricks),
And the **N**LTC for **6 ½** tricks (6 losers from 12 ½ losers = **6 ½** tricks).
The **Optimal** point count gives this hand **19 ½** pts (4 **L** pts + 3 **S** pts for 4 honors in the long suit + 2 **D** pts for its singleton) and is the ***only*** point count accurately assessing its appropriate value.

Let's now outline some specific defficiencies of the LTC or NLTC.

First, it fails to reflect **the full value of long suits** of 5 to 6 cards, or more. Illustration : the NLTC counts the following suits as having **3 ½** L each which, out of a maximum of 6 ½ losers, gives them only **3** winners each, when the first suit has **4 ½** winners and the second has **6** winners :

♠ A Q 10 x x opposite ♠ K x x (**13 ½** pts in **Optimal** pt count)
♠ A Q 10 x x x opposite ♠ K x x (**15 ½** pts in **Optimal** pt count)

Of course, the 5th and 6th cards are counted as one or two ***fewer*** losers in ***other*** suits but that is still **short** 1 trick – the 4th card is ***unaccounted*** for ! And this serious discrepancy of one + trick "doubles-up" with 5 - 5 two-suiter hands, like the one below :

♠ A Q 10 x x	♠ K x x
♥ x x	♥ J 10 x
♦ A Q 10 x x	♦ K x x
♣ x	♣ x x x x

LTC count :	5 L	+	10 L	=	15 L	=	**9** tricks
NLTC count :	6 L	+	10 ½ L	=	16 ½ L	=	**8 ½** tricks

The 4 ♠ game will be missed. That's because both counts count 4 or 4 ½ losers in clubs, when, obviously, there is only one.
While in **Optimal** point count, these two hands have **28** HLDF pts and will be bid to 4 ♠.

Or this one :

♠ A Q 10 x x	♠ K x x
♥ K 10 x	♥ Q J x x
♦ A Q x x x	♦ K x x
♣ ---	♣ x x x

LTC count :	4 L	+	9 L	=	13 L	=	11 tricks
NLTC count :	5 L	+	9 ½ L	=	14 ½ L	=	10 ½ tricks

The 6 ♠ slam will be missed. That's because both counts count 3 losers in clubs, when, obviously, there are none.
While, in **Optimal** point count, these two hands have **35 ½** HLDF pts and will be bid to 6 ♠.

Second, it does **not** account for the value of **Fits** and honor "**mesh**" in "fitted" suits. As a result, the following hands will be **under**valued :

♠ x x x	♠ A x x
♥ A x	♥ x x
♦ K x x	♦ A Q J x x
♣ A Q x x x	♣ K x x

NLTC count :	7 ½ L	+	6 ½ L	=	14 L	=	11 tricks.

A **slam** will be missed – as it would with **any** point count, by **any** bidding system. Only the **Optimal** point count gives these two hands **36** HLF pts for 6 NT (9 pts for 2 Aces, 1 point for each 5-card suit + 1 pt for 3 honors in a 5-card suit, + 4 Fit pts in clubs and diamonds).

Furthermore, the **NLTC** : 1) does **not** value the **J 10 x** combination by itself, 2) it gives ***no distributional*** value to hands with **less** than **4**-card trump support, and 3) it **ignores** the value of 8-card Fits. 3 major flaws it cannot recover from. Thus, the following hands will be mistreated :

♠ A Q x x x x	♠ K x x
♥ x	♥ A J 10 x x
♦ Q x x	♦ x x x
♣ A x x	♣ x x

NLTC count : 6 ½ L + 8 ½ L = 15 L = 10 tricks.

4 ♠, which will fail, will be bid (1 ♠ 3 ♠ 4 ♠).
The **NLTC** counts 3 ½ L in clubs, for **3** tricks, where there are no more than two tricks (the Ace and one ruff).

Instead of : 2 ♠ (6 ♠, 15/17 HLD pts) 2 NT ?
3 ♥ (♥ singleton) 3 ♠ (final - wasted ♥ honor pts)

Another example :

♠ A Q x x x x	♠ K x x
♥ x x x	♥ x
♦ x	♦ J 10 x x x
♣ A Q x	♣ J 10 x x

NLTC count : 6 ½ L + 10 L = 16 ½ L = 8 ½ tricks.

4 ♠, which is *odds-on*, will be missed (1 ♠ 2 ♠ Pass).
NLTC counts 4 ½ L in clubs, for 2 tricks, where there are 3 ½ tricks.

In **Optimal** point count, these two hands add up to 16 HLD pts (no K) + 11 HDF pts = 27 pts, and will be bid as follows :

2 ♠ (6 ♠, 15/17 HLD pts) 3 ♥ (♠ Fit, ♥ singleton)
4 ♠

Or this deal :

♠ A Q x x x	♠ J 10 x
♥ A x	♥ x
♦ J 10 x x	♦ A Q x x x
♣ x x	♣ x x x x

NLTC count : 8 L + 9 L = 17 L = 8 tricks.

4 ♠, which is *odds-on*, will be missed (1 ♠ 2 ♠ Pass).

In **Optimal** point count these two hands add up to 14 HLD pts (no K) + 12 ½ HLDF pts (no K) + 3 pts for the 9-card ♦ Fit with J 10 = **29 ½** pts.

Yet, the **N**LTC's ***biggest handicap*** is the need to establish a Fit before the NLTC can be used, which "eats-up" bidding space (5 steps for a single raise, 10 steps for a jump raise) and, as a result, takes the bidding to a level too high to discover a ***duplication*** of values (*wasted honor pts*).
Illustration :

	West	East
	♠ A K x x x x	♠ x x x
	♥ Q J x	♥ x
	♦ K x x	♦ Q x x x
	♣ x	♣ K Q x x
NLTC count :	6 L	+ 8 ½ L = 14 ½ L = 10 ½ tricks.
The bidding will be :	1 ♠	3 ♠
	4 ♠ *Down one*	

That's because the **N**LTC counts 2 ½ L in clubs, for **4** tricks, when there are no more than 2.

Instead of :	1 ♠	2 ♠
	3 ♣ (♣ singleton)	3 ♠ (*wasted honor pts*)
	Pass	

Here is a deal from a Bridge book :

	West	East
	♠ A Q x x x x	♠ K x x x
	♥ A x x x	♥ x x
	♦ ---	♦ Q 10 x
	♣ A x x	♣ K x x x
NLTC count :	5 L	+ 9 L = 14 L = 11 tricks.
LTC count :	**4** L	+ 8 ½ L = 12 ½ L = 11 ½ tricks.

In the above case, the "modified" LTC is more accurate than the **N**LTC as the "modified" LTC **reduces** the number of losers in West's hand to 4 because the hand has ***more Aces*** *than Queens*.

The book's authors comment on this deal as follows : « *The bidding will be :*

1 ♠	3 ♠
4 ♠	

« *Congratulations! You have reached an excellent game with only 22 H pts* ».

Really? But then you will miss 6 ♠ should East have the ♣ Queen, instead of the ♦ Queen. LTC or **N**LTC + awful bidding = awful outcome !

In the above case, both counts, the "modified" LTC and the **N**LTC, count **4** losers in hearts when there is clearly **only one** and **2 ½** losers in diamonds when there is clearly **none**.

In **Optimal** point count, these two hands, with K **Q** x x in clubs, would add up to 20 ½ HLD pts (no K) + 14 ½ H**DF** pts + 3 pts for *"no wasted honor pts"* in diamonds = **38** pts! 6 ♠ will **not** be missed !

With the advent of the **Optimal** point count, there is no longer any reason to resort to the flawed LTC or **N**LTC for hand evaluation – and players who previously used either count, counting in half-*tricks*, will have no problem counting in half-*points*.

Note : the **Optimal** Hand Evaluation book includes **72** deals with 8 + card Major suit Fits (including 13 slam hands with minor suit Fits). Interestingly, the "New"LTC has it **wrong** in 31 of these 72 deals, i.e. **47** % of the time !