Story of restoration

<u>Gruen PAN AM</u>

<u>Preamble</u>

We often get watches in our workshop (located in Germany) for restorations which are over the hill, and for that reason nobody would like to look at. In most cases they are old ones, which was worn often and gladly from the original owner, and for that reason they have many scratches, dings and other marks of worn in the plating of the cases.

Before owners put their old watch away there was often a mechanical damage too. With damage and baldy worn the watches mostly get into a drawer and over the years they will be forgotten. Not uncommonly it's the next generation who find the old watches, but mostly they misunderstand the value and so the watches got thrown away.

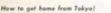
The History of the Gruen Precision Veri-Thin PAN AM ACE

About which watch the story is, Gruen ? Never heart about ? In Germany it's an exotic, but known by serious collectors . Gruen had made so much unique and beautiful watches, and they have written now and then a capture of watch history.

The Gruen PAN AM got to honor with it's 24 hour dial with Arabic numbers and the read sweeping second hand which was not normal for this decade. On the face of it for the 40s an eye catcher and provocatively different. The story of the maketing for this watch a bestseller.

RELEASED OCT. 1 The New Gruen Pan American!

The production of the Pan Am series startet 1943, first only for the pilots of the "Pan American World Airways" better known as PAN AM. The airline quit its civil airtravels in this phase of the 2nd world war and supported the US airforce. Although not in official sales the marketing campaign for this watch started in newspapers and magazines.



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In the 40s air travels has had some glamorous an a little bit mystic, it was something special and most ones want to be a part of the technological progress. Next to the technological progress in the aviation the 2^{nd} world war was a issue for the marketing too, and Gruen advises itself as the supplier of military aviation support. The people are interested in both issues and Gruen advises these watches with very cleverly campaigns and specifically photos with famous pilots. They spark interest for these watches and stoke the longingly of people – a status symbol was born. It was the end of the 2. World, on 1st October 1945 the first PAN AM watch comes into the official sale and got a track record.

The buyers came out of multiple classes of population. For the workers the watch was the proof of the technological progress in the aviation which they consider proudly. Also combat veterans bought these watches and wear them with patriotic amour propre.



Gruen produces several PAN AM models, also 2 angular shaped ones. It's the model "ACE" our story told from (second from left).

Restaurations-Projekt – Gruen Precision Veri-Thin PAN AM ACE

In this example we want to show you the story of restoration of a "Gruen Precision Veri-Thin PAN AM ACE"

We got the watch in our workshop, and as you can easily see in the pictures it was in a really bad shape.

description before restoration:

- the gold finish on case badly scratched an worn off
- hoary on the back of the case bezel
- the crystal gone
- the dial without the protection of its crystal badly darked
- No stem and no crown
- The gasket rough and fragile
- The mainspring has no power anymore (stored overwound over many years)
- Broken staff pivot
- No luminous onto the watch hands
- Very dirty movement with no function



As written in the preamble such watches were often found from the next generation and the real value and prettiness were not seen behind all the dirt and defects. Fortunately our watch was no victim of the drump mentality of most people. The finders provide the watch on an online auction, so this was the place we bought it. So the watch comes from USA (Michigan OHIO) to Germany, and we got the plan to restore the watch as original.

After the first sighting In our workshop the watch got rough disassembled, so there were the following parts:

- bezel and caseback
- <u>movement</u>
- dial and hands

Each part of our workshop has an own focus area, so it brings us to the 3 project-parts, this means that the disassembled watch parts (case, dial and movement) goes different ways for the next time, until they will be assemble after the full restoration of each part.

Project part case with back

We began with fine cut and a detailed polishing. After that all scratches and worn case spots were gone and we startet with a good cleaning in the ultrasonic cleaner for the dissemination of the new gold plating. First we put an shift of copper plating on the bezel, and in the last step the bezel got its gold finish. A new domed crystal were put on the bezel and the case back got an polishing too.

After all that work the case was as new.



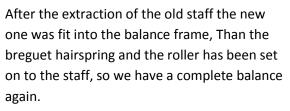
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project part movement

This part should be a bit more difficult. We have to fit the new crown on the new stem cut this on the right length and fit both into the movement. The old mainspring was replaced into a new S-type mainspring with optimized power.



The broken staff hast he be replaced. Therefore the roller and the hairspring gets off, and the staff was pulled out of the balance frame.







After all parts were replaced and repaired the movement was completly disassembled and got an good cleaning in an automatic cleaning machine.

After the cleaning the movement parts was assembled, old and checked for timekeeping on a timing machine.



After all that work we got a movement in perfect working order.

Project part dial and hands

The dial and the hands have to be restored too. The work on the dial is for a specialist and so we send it to a company for dial restoration in USA. There it was repainted as original.

The hands was overhould in our own workshop and new luminous was put onto the hands so they glow in the dark, as they should.



Dial and hands after restoration (mounted on the movement)

After this work we got a dial in original style as new and also a pair of restored watch hands.

Final assembeling

After we have completed all 3 project parts the assembling of the whole watch stands before. This is the best part of all, and it's a beautiful moment to see when all project parts fits together and a part of watch history was rebuild.



completed project parts before assembling

After the assembling it follows a 3 day test and the construction. With writing the report it's the end of the project and the beginning of a new one.

<u>Result:</u>

Now for every one who read the story down the line... the result !

Perhaps you can understand the fascination of the people in the 40s, who longing for such a watch. And perhaps one day they bought one of the PAN AMs



I feel certain that the hearts of every watch collector leaps for joy on looking this watch.

We enjoyed the project, and it makes us a little bit proud to kwon that we helped to save this part of watch history for the future



project resümee

Naturally we also want to regard the financial aspect, such project must be payable and worthwhile, also when it's an item with sentimental value.

Everybody who see the pictures and read the story and see all the activities got the same question :

How can such a work be worthwhile and payable for everyone?

Is it unworthwhile and unpayable?

NO, is the clear answer.

You need experts who know one's craft, who have all the parts needed and also the right machines must be there. It seems crazy but the whole work time on the project war not longer than 2 hours (for an expert). Sure this time was distributed onto 6 months, this was cased that we get refinished our dials in the USA, so we have to send them overseas. In cause of the latency we can't complete a whole project straight.

In case of our know how of restoring watches and efficiency we can work, the costs for working time is not the major thing and the most parts we have in your own warehouse. H client have to spend about 200-250 Euros for the listed work, that's not too much, and payable for nearly everyone who is attached to his old watch. (price 2015)

Bad Camberg, 21.05.2015



www.watch-seller.de