

GLYCINE AIRMAN



Founded by Eugène Meylan in 1914, Glycine produced watches at a factory in Bienne, Switzerland. Glycine began producing specialty ladies watches with precise, small movements in cases of gold and platinum dressed with diamonds and precious stones. In 1931 Glycine created an automatic movement based on the Harwood 180 degree "Bumper" which had a repair feature providing the watch maker the ability to remove the automatic portion of the watch without disabling the movement. In 1952 Glycine introduced the VACUUM chronometers, which were touted for their resistance to water and shock. In 1953, Glycine introduced the most famous of all Glycine watch: the AIRMAN. The AIRMAN was a TRUE 24 hour watch favored by both military and commercial pilots and was the choice of watches by many U.S. Air Force pilots during the Vietnam War. Glycine still makes several variants of the Airman including the Incursore, Combat, and Lagunare series



[OUR FREE GLYCINE AIRMAN.pdf](#)

MOVEMENT HISTORY

First 180 Automatic

The first self-winding wristwatch was invented in 1923 by Englishman John Harwood and used a 180 Degree [half] ratchet mechanism that wound the mainspring in one direction only and would "bump" and hit a stop bridge each time. The constant banging of the weight began caused premature failure, even when springs were added as a shock absorber, it still caused damage. The "Bumper Automatic" was utilized up into the 1950's .

First 360 Automatic

In 1930, Rolex, using the Harwood Core, patented, and exclusively produced only for Rolex brands the first 360 degree bi-directional automatic movement. The Pendulum rotated 360 degrees; winding both ways.

FELSA BYDYNATOR



THE WORLDS FIRST INDEPENDENTLY DESIGNED TRUE 360 DEGREE TWO WAY WINDING AUTOMATIC MOVEMENT AVAILABLE TO THE MARKET WAS PATENTED BY FELSA IN 1942. This amazing, beautiful, compact, durable 360 degree Bi-directional - Dual Winding automatic movement was named . THE BIDYNATOR. Nearly every automatic that followed was based on the Bidynator. Additionally, most high end brands used the BYDYNATOR, The actual inclusion into watches had to wait in most circumstances until after WWII. Thus we see an explosion of automatic watches in the late 1940s to early 1950s. Brands using the Bidynator included the all the great top line manufacturers. including THE FIRST GLYCINE AIRMAN LINE,.



**THE FIRST TRUE PILOTS WATCH
DESIGNED BY A PILOT AND
SPECIFICALLY FOR PILOTS BY AN INDUSTRY GREAT
LAYING THE GROUND WORK FOR THE AIRMAN
LONGINES**



**Capt. Philip Van Horn Weems
1927 LONGINES**

2 styles early 27.7 mm locking crown at 2 pos later 33mm locking crown at 4 pos

In 1929, Captain Philip Van Horn Weems of the U.S. Navy (1889-1979), designed a system for navigation along with a **Second Setting Watch** watch that used a **rotating exterior bezel or center dial with minutes/seconds chapter ring to synchronize the watch to the second using the radio time signal without adjusting the hands**, This design incorporated a second "locking" crown that allowed the user to lock down the rotating bezel at the precise timing on the bezel. Captain Philip Van Horn Weems designed the "Weems System of Navigation" in 1927 - the year Lindbergh crossed the Atlantic. His "system" employed a modified sextant taking two "shots" of the sun, allied to an accurate time reading from his "**Second Setting Watch**", followed by making reference to the tables in the Line of Positions book. (The Line of Position book provided extensive charts with PRE-calculated positions; allowing a pilot to look up the positions quickly and easily, instead of performing the complicated calculations himself.)



[restoration by rock](#)

NOTE THE ROTATING BEZEL LOCK AT 2

PRECISION FLYING DEPENDED ON LITERAL SECONDS, A few seconds off at air speeds and over great distances could prove dangerous, if not fatal. The Weems system, along with his invention of the **Second Setting Watch, manufactured by Longines**, enabled pilots and navigators to read truly accurate time directly from the watch face during an era when chronometrical precision was costly and rare. In 1929, in partnership with Longines, Weems registered a patent for this design. Longines produced **the original "WEEMS" with locking crown at 2 position** and added then **larger model with locking crown at 4 position.**, [the Weems came in two sizes. one the same size of the decade later U.S. GOV MIL WWII A-11 PILOTS WATCH]

**THE SECOND PILOT DESIGNED WATCH FOR THE PILOT
DESIGNED BY THE AVIATOR LINDBERGH
A PUPIL OF WEEMS
PRODUCED BY LONGINES
THUS LAYING ADDITIONAL GROUND WORKS FOR THE AIRMAN
PATENT REGISTERED 1935.**



HOURS ANGLE WATCH
MODERN VERSION

Charles A. Lindbergh, a pupil of Weems, used the WEEMS concept as an additional feature in his Hour Angle Watch. This first "Hour Angle" watch, which was patented by Lindbergh, had a hand wound pocket watch movement inside of a **huge case and an extra long leather strap for wearing over a thick flight jacket sleeve. The crown was oversized to facilitate winding while wearing gloves.** Featuring a demarcated rotating bezel that allowed for the equation of time (the difference between a standardized 24-hour day and the fluctuating time of the Earth's travel around the sun), it was an accurate time piece which calculated longitude. A rotating central disc on the dial allowed for the synchronization of the seconds without stopping the sweeping hand. And unique dial markings allowed a pilot to instantly tell his location by corresponding the time with the earth's 360-degree rotation (the "hour angle").

Both the bezel locking mechanism of Weems, and the use of an external bezel for flight by LINDBERGH with the added 24hr modified movements by HELBROS AND A FEW OTHERS IN 1942, offered Glycine the opportunity to the Glycine Airman. Only a patent free hacking method was left to tackle.

**THE FIRST US GOV MIL ISSUE PILOTS WATCH
THE A-7 WAS THE FIRST ISSUED
MILITARY PILOTS WATCH**



THE VINTAGE USAAC A-7 WAS PRODUCED UTILIZING A LONGINES SILVER POCKET WATCH/STOP WATCH WITH A STANDARD INDUSTRY BUTTON IN CENTER OF CROWN FOR THE TIMING DEVICE. IT WAS, IN FACT, THE FIRST SIGNED US GOVERNMENT ISSUED PILOTS WATCH I AM AWARE OF, AN A-7 DESIGNATION AND "USARMY AC" ON CASE BACK-. YEAR MID 1930.

THE FIRST PRODUCTION TRUE 24 HOUR WATCHES 1940/50S.



[Modified 24 hr movements were also sold by other companies like the Helbros 24hr windup line.](#)

GLYCINE WOULD UTILIZE THE TECHNOLOGY THAT WAS UTILIZED IN THE NON AUTOMATIC TRUE 24HR WATCHES LIKE THESE ABOVE FROM 1941 THROUGH 44 THROUGH 50'S. ABSOLUTE TRUE 24 HOUR MOVEMENTS UPDATED OFF THE SHELF MOVEMENTS THAT WOULD GAIN AUTOMATION IN THE EARLY 1950'S. ONLY THE HACKING METHOD HAD TO BE CONFIGURED. YET, PATENTS ON THE STANDARD HACK WATCHES WERE IN FORCE. THEY WERE PATENTED FOR THE A-11 WATCHES.

THE FIRST MILITARY HACKING PILOTS WATCH A-11 WWI 1941-1946 A-17 1950-1955



BULOVA A-7 HSW
A-11 NO ILLUMINATION

BULOVA A-17 GSW
A-17 24HR RADIUM DIAL

PRODUCED BY VARIOUS MAKERS, THE A-11 FOR WWII AND THE A-17 FOR THE KOREAN WAR - WHICH HAD A 24HR RADIUM DIAL, WERE SPECIFIC PILOT/NAVIGATOR WATCHES - THOUGH THE WATCH WOULD BE UTILIZED BY OTHER BRANCHES INCLUDING GROUND TROOPS.

THE A-11 HAD A PATENTED HACKING LEVER SIMILAR TO JUST ABOUT ALL STOP WATCHES MADE FROM LATE 1800 TO PRESENT DAY. WHEN THE BUTTON/CROWN IS PUSHED IN TO STOP A TIMER, A "HACK" LEVER BEGINS AN ACTION THAT RELEASES A FRICTION STOP LEVER INTO THE BALANCE WHEEL CAUSING THE BALANCE TO CEASE ROTATION UNTIL RELEASED BY PUSHING THE BUTTON/CROWN AGAIN OR PUSHING A SECONDARY BUTTON.

ONLY TIMERS SUCH AS THE WWII A-8 NAVIGATION 10SEC TIMER, THAT OSCILLATE. AT SUCH INCREDIBLE SPEED THAT ANY ABRUPT STOPPAGE COULD DAMAGE THE STAFF/BALANCE ARE WITHOUT A HACKING MECHANISM.

AN A-11 CANNOT BE "STOPPED". AFTER TIMING AN EVENT, THE CROWN IS CLICKED DOWN THAT STOPS THE HANDS -WHILE THE MOVEMENT CONTINUES TO RUN,- AND WHEN CLICKED AGAIN, THE HANDS "FLYBACK" TO TDC...- THE MOVEMENT CONTINUES TO RUN.

IN FACT, THE BALANCE WILL CONTINUE TO WIZ UNTIL THE MAIN SPRING IS UNWOUND COMPLETELY. : **HENCE THE NICK NAME "THE JITTERBUG"** ...

ON THE A-11/A-17, AS WELL AS WATCHES MADE FOR VIETNAM WAR, THE ACTION BEGAN BY PULLING THE CROWN WHICH THEN ACTIVATES THE HACK LEVER STOPPING THE BALANCE.. THE HACK ABILITY OF A WRIST WATCH ALLOWED ONE TO SET EXACT TIME, TO TIME AN EVENT, AND, MOST IMPORTANTLY, ALLOWED A GROUP OF FLIERS AND NAVIGATORS, GROUND FORCES, ALONG WITH COMMANDERS ON THE GROUND OR IN FAR OFF COMMAND POSTS, TO ALL HAVE EXACT TIME. YES, TO ALL SET THEIR TIME PIECES EXACTLY.

AN IMPORTANT FACT IS THAT ALL THESE HACKING WATCHES DID NOT HAVE A FLY BACK MECHANISM. A FLY BACK IS THE DEVICE THAT CAUSES THE SECOND HAND TO RETURN TO TDC [TOP DEAD CENTER UNDER 12/24] WHEN THE WATCH IS STOPPED. LIKE THAT OF CHRONOGRAPHS AND POCKET STOP WATCHES. .

SO, HACKING THE A-11/17 DID NOT MOVE THE SECOND HAND TO TOP DEAD CENTER, RATHER, IT SIMPLY SHUT IT DOWN SO ONE COULD TIME THEIR WATCHES. SO, YOU WOULD WAIT UNTIL THE SECOND HAND WAS AT TDC-UNDER 12 TO PULL THE CROWN FREEZING TIME WITH SECOND HAND AT 12. THEN SET IT INDIVIDUALLY, OR IN A GROUP EVENT, A GROUP OF PILOTS/NAVIGATORS COULD ALL "ZULU" THEIR WATCHES WHEN READYING FOR THEIR MISSION,

[A COMMANDER ISSUES A ZULU COMMAND TO PILOTS & NAVIGATORS](#)

[B-52 CREWS READY FOR MISSION Utapao Air Base Thailand During The Vietnam War]

THE GLYCINE AIRMAN A TRUE R24HR PILOTS WATCH WITH HACK FEATURE



Glycine Airman 1953

Glycine launched the first legendary "Airman Watch" in December of '53 by applying for a 24 hour bezel patent. The patent would be issued in May of 1956 with number [Swiss Pat] 314 050. The first Airman had a White dial, red numbered white date wheel with no hacking method.

In 1953 the first Airman **AM/PM [on dial]** model was issued with pencil hands and **patent pending marks on case back**. It did not have a hack mechanism, it had the red date and no magnifier.

FIRST Glycine Airman AM/PM is scarce, no hack mechanism, no hand tail-end on minute or hour hand, red numbered date wheel,
The 1953-1960 Airmen utilized a 23 jewels, Felsa 692 N Bidynator with wheels modified for true 24 hour time
The early Airmen with the Felsa 692 Bidynator movement had hour markers at 12 and 24 o'clock in the shape of triangles indicating a Felsa caliber, while those with dots indicate Schild caliber.



In **1954-56** the second model with a tail end minute hand **[the minute hand had an extension]** and the **date magnifier was released.**

In **1957-58**, a modification was made to where the **tail end** was placed, it was removed from minute hand and placed on the **hour hand**

NOTE 3- the hand tail IS A STATIONARY GMT HAND. BY UTILIZING THE 24 HOUR BEZEL, YOU CAN SET THE TIME OF, SAY, CALIFORNIA'S WHILE MAIN TIME IS NEW YORK. YOU SIMPLY SET THE TAIL END OF HOUR HAND TO BEZEL TIME. AM OR PM. ONE O CLOCK NEWYORK, THE VIEW THE HOUR TAIL END FOR SECOND ZONE

MOVEMENTS



All early Airmen had the below Felsa 692 Bidynator movement, though modified to 24 hour, and signed.

WHEELS CHANGED FROM 1 COMPLETE TURN EQUALING 12 HOURS TO ONE COMPLETE TURN EQUALS 24 HOURS –THIS WAS A SIMPLE HACK



- 1953 - 1960 (1) Felsa 692, Bidynator 23 jewels
- 1960 - 1967 A.Schild 1701, 25 jewels Airman and 17 jewels in the Airman Special
- 1967 - 1971 A.Schild 1903, 25 jewels
- 1971 - 1974 A.Schild 2063, 25 jewels
- 1974 - 1978 A.Schild 2163, 25 jewels

Airman 1	Felsa	690 N/ 692 N	11½"	18000	23	1953-60
Airman 1, Airman 1 Special	A. Schild	1700/ 1701	11½"	18000	25/17	1960-67
Airman 1, Airman 1 Special, Airman SST	A. Schild	1903	11½"	21 600	25/17	1967-71
Airman 1, Airman 1 Special, Airman SST	A. Schild	2063	11½"	21 600	25/17	1971-74
Airman 1, Airman 1 Special, Airman SST	A. Schild	2163	11½"	21 600	25/17	1974-78
Airman SST Chronograph	Valjoux	72	13"	18000	17	ca. 1970
Airman Quartz	FHF	960.111		32768 Hz	9	1978-88
GMT-2000	Eta	955.422	10½"	32768 Hz	7	1989-94
Airman Worldtimer Ref. 3323	Eta	955.424	10½"	32768 Hz	7	seit 1991

CASE BACKS



[1 AND 2] ALL Airman with the Felsa 692, Bidynator 23 jewel movement have a similar method of marking case-backs with the letter 'A' and then digits. The markings in the first Felsa 692, Bidynator 23 jewel powered models do not appear in the case-backs of the later AS/ETA powered models

[1] All Airman watches produced before Glycine's famous 24h bezel patent registration was issued are signed/marked "Patent Pending" and "Modele Depose" on the case-back with the inner case-back marked with the 'perfection' logo of Glycine.



[3] The Schild AS caliber began after 1960 and have the inner case-back logo registered by Glycine as 'perfection'

[4] IN 1965 THE SCREW DOWN CASE BACK WAS REPLACED WITH A SNAP BACK LIKE THE ZODIAC SEA WOLF, THOUSANDS SERVED IN THE NAM.

HELP WITH DATING

The final evolution into the models that made the Airman Famous continue with the mechanical hack mechanism, changes in the 12 and 24 illuminated markers and the moving of the tail on the minute hand to the hour hand



Note: the illuminated hour markers. The early white dial, red date, has illuminated dots for 12 hour [1-12] and illuminated rectangular for 24 hr [13-24], The middle has illuminated dots for every other number 1-24. The 1978 Glycine logo version has 24 hr arrow/spear markers.



The first series on left w/white dial has rare illuminated hour numbers and

illuminated triangular markers in rotation. The center has illuminated dot markers every other marker 1- 24 hr. To the right there are illuminated dots every second number, from 1-24.

note: 1960-67 AIRMAN SPECIAL with hour markers at 12 and 24 in the shape of dots have Schilde A.Schild "AS" caliber 1701/02 17 jewel movements



In 1967 Glycine begins using "CROWN" logo and launched the "Combat", "GMT", "Airman SST Chronograph" and "Airman SST" and "Glycine Automatic Sport SST" in paying tribute to the Super Sonic Transport project, Boeing 2 707. These are quite easy to id as far as dating.



markers

signing "no automatic"



White Dial Automatique



Black Dial Automatique

Major model changes can be as simple as changing a word. The white dial, red date Airman with automatic spelled in French as 'Automatique' on dial center above the "12" --a French influence possibly due to the Indochina War- and it's tail-ended Minute hand finally evolved after 1960 with 'Automatique' altered to the English word 'Automatic' and its long tail minute changed to a long tail hour hand [ready for USA and Vietnam?]

CROWNS TO MAGNIFIERS



A 'cross hatched' crown -though this was not available in all models.-- appeared thus if you discover a airman with cross hatch crown you know it is mid sixties



THE DATE WHEEL NUMBERS OF THE FIRST SERIES WERE RED
IN ADDITION THERE WAS NO MAGNIFIER
IN THE ABOVE IMAGES ALL BUT ONE SHOW RED NUMBERED DATE.

HERE WE SEE FROM NO MAGNIFIER TO ROUND TO SQUARE MAGNIFIER

DIALS & STYLES

the hand tail IS A STATIONARY GMT HAND. BY UTILIZING THE 24 HOUR BEZEL, YOU CAN SET THE TIME OF, SAY, CALIFORNIA WHILE MAIN TIME IS NEW YORK. YOU SIMPLY SET THE TAIL END OF HOUR HAND TO BEZEL TIME. AM OR PM. ONE O CLOCK NEWYORK, THE VIEW THE HOUR TAIL END FOR SEOND ZONE



The modification of the hands began with the Airman Arrow Tale, First The Minute Hand Then The Hour Hand. **As discussed, the Airmen from 1954 & 55 had a arrow tail on the minute hand. From 1956 onwards, the hour hand has the tail-end.**

THE EVOLUTION OF THE AIRMAN HAND WHEN GLYCINE WAS GLYCINE

all of the above are pre 1960 first series evolution

1st: white/red date note standard period radium hands

2nd: pencil radium hands with tail on the minute hand

3rd: similar to number two also red date

4th: tail was switched to a new large illuminated arrow hand

5th like fourth with but on a white dial

AIRMAN SPECIAL ID



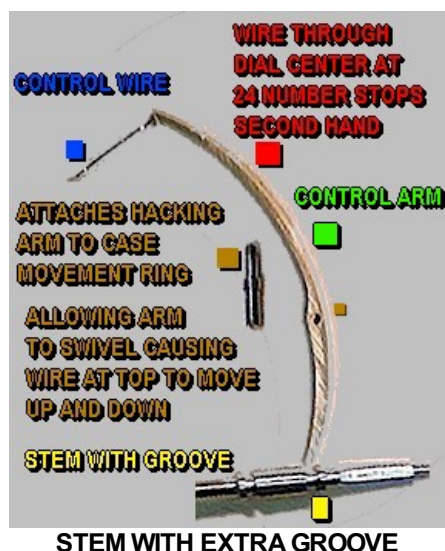
The 1960-67 Airmen utilized the A.Schild 1700/01E 17j movement
 The 1960-67 Airman 'Special' utilized the A.Schild 1700/01E 25 Jewel movement
 A. Schild AS 1701/1903/2063/2163 were utilized in the post 1960 Airmen dating a movement dates the watch

KEY FEATURES

Some Airman models have a triangle hour indicator at 12 and 24, often what seems like the same models have hour markers at the odd hours, or positioned in the second/minute scale. The A.Schild 1701/02 caliber, 17 jewel Glycine Airman Special from 1960-67 has dot hour markers at 12 and 24 hours

HACKING YOUR AIRMAN

The use of a method for "hacking" the Airman involved no major alterations to the mechanics of the movement other than the stem needing to be doubled channeled and room made for the Hacking Arm to connect to the stem. As explained above, hacking begins with the crown being pulled and a hacking lever being moved into a position where a BALANCE WHEEL device uses direct friction to stop it. Thereby the sweeps second hand stops along with the entire movement. The A-11 and A-17, the Seiko Dive 6105, the Westclox, The Elgin, Bulova, Waltham as well as the Benrus Vietnam US Military issued watches all involved this method of hacking. In fact I am not aware of any other method. ,



YET ON THE GLYCINE AIRMAN, THE HACKING FEATURE IS PROPRIETARY AND COMPLETELY UNIQUE. THERE IS A CURVED HACKING TOGGLE LEVER "ARM" WITH A WIRE AT TOP. THIS ARM IS ATTACHED WITH A SWIVEL PIN THROUGH THE MOVEMENT RING.

THE WIRE ATTACHED AT THE TOP OF THE HACKING ARM IS THREADED THROUGH A HOLE IN THE A MINIATURE HOLDING DEVICE IN THE DIAL BETWEEN THE 24 HR NUMBER [2 "WIRE" 4] AT THE TOP OF DIAL.

UTILIZING THE SAME TECHNIQUE OF ALL HACKING MOVEMENTS, THERE IS AN EXTRA DENTE/CHANNEL ON THE STEM [SHOWN ABOVE AND FURTHER DOWN - WHERE, IN THIS CASE -PUN!- CONTACTS THE LOWER END OF THE HACKING. ARM.

PULLING THE CROWN MOVES THE BOTTOM OF ARM TO THE RIGHT -HACKED- AND PUSHING THE CROWN IN MOVES THE LOWER PORTION OF THE ARM TO THE LEFT - NORMAL

NOTE
PULL CROWN, THE TOP OF ARM MOVES TO LEFT FORCING THE WIRE UP INTO THE WATCH.

WHEN THE SECOND HAND REACHES THE 24 HOUR POSITION IT STOPS THE HAND AND THUS YOU ARE AT TDC.

PUSH THE CROWN IN, THE TOP OF ARM MOVES RIGHT PULLING THE WIRE DOWN AND FREEING THE SWEEP SECOND HAND AND THE WATCH STARTS BACK UP.

YET THE MECHANICS THAT WERE DESIGNED WERE POORLY CONFIGURED SO THAT THE HACKING FEATURE IS USUALLY NON EXISTENT, BROKEN OR DAMAGED IN MANY AIRMAN THAT SURVIVED. MUCH OF THE DAMAGE WAS FROM REPAIRS BEING CONDUCTED W/O KNOWLEDGE OF THE MECHANISMS. WITH THE AIRMAN THERE ARE FIVE DISTINCT PARTS THAT ARE DIFFICULT TO MAKE-THOUGH AN INTERNET SEARCH MAY REVEAL A FEW INDIVIDUALS WHOM MAY MAKE THE PARTS.



The Airman does not use the known hacking technology. Instead, it utilizes a "wire" system along with a movement ring. A dente/channel/groove is cut in the

stem, and, just like all stems, this channel interacts with a setting lever. When crown is pulled a setting lever is moved allowing one to set time. When pushed back in the lever moves into a winding position. So using this basic existing system, the Airman utilizes a stem with an additional groove/channel cut. Then a "toggle" hacking arm is attached to the movement ring. At the end is an attached wire that goes through the dial;. note These parts cannot be replaced.

On a hacking watch, the addition of a hack lever performs the action of stopping the movement. On the Airman the extra stem groove/channel/dente interacts with the hack lever arm with a wire. This wire is attached to the top of the hacking toggle arm movement pinned to the inner movement case ring.

When you pull the crown it pushes the wire up into and through the dial at tdc - top dead center - of the 24 number stopping the sweep center hand and the entire movement.



As to the difference between the Airman and the old school military Hacking watches, one has to wait until the second hand reaches tdc before you pull the crown and set your time. . but, in real war, you can hack the watch at any time and time an event or perform other functions immediacy, while the Airman only hacks at 24 hours.means the old school hack is much more efficient in a combat situation.

This other factor is that the wire method can break down. This method of hacking has never, to my knowledge, been utilized in any other brand, it simply does not operate as efficiently or is it as durable as the simple hacking lever movement..

This mechanism was only utilized in the Glycine late '50's and '60s in Airman and Combat lines. This means that spare wires and/or parts are limited at best. Additionally, the Felsa. Schild, ETA models have different cases with different case rings.



AS 1701 AS 1903

1971-74 Airmen A. Schild 2063 movement
1974-1978 Airmen A. Schild 2163 movement (hacking movement only)
1979 First Glycine Airman ' Quartz' watch is introduced



AS 2063 21600



Patents No. 314050 and No. 14151

Highest Precision
~~17~~ jewel 17
 lever movement
 Automatic, selfwinding 360° Rotor
 Anti-magnetic
 Unbreakable Mainspring
 INCABLOC Shockprotection
 Heavy stainless steel, RUSTPROOF,
 WATERPROTECTED watchcase

EXAMPLES



INSTRUCTIONS FOR PROPER USE

1. The watch is automatic selfwinding. Needs no special attention.
2. The calendar is also automatic. To set it when putting the watch into service, advance hour hand until today's date appears in aperture near winding crown. At the end of the months of 30 days, advance hourhand by one full turn of the dial.
3. The 24-hour dial under the crystal should then be set to your schedule time (G.M.T. or your company's working time).
4. Now unscrew the bezel by turning the lower crown (opposite figure 6 of dial) backwards **not more than one quarter turn**. This releases the bezel or rim.
5. Set the movable rim to the local time you actually live in. If your schedule time on inner dial is G.M.T., then the conversion table on this page shows you how to set rim. If your schedule time is for instance E.S.T. and you are stationed in the C.S.T., set figure 24 of rim opposite hour 1 of inside dial.
6. Tighten screw to fix bezel in set position.
 You can now read schedule time on dial and also read your local time on the rim simultaneously.
7. To set the AIRMAN accurately to the second from a time signal,
 - a) pull out winding stem opposite figure 6 of inner dial,
 - b) wait until sweepsecondhand stops at figure 24,
 - c) now set the minute and hourhands to correct time.
 - d) At the sound of the time signal, push winding stem in.

Do not forget to change position of rim when entering new time sector.

OUTSTANDING FEATURES

Automatic calendar with
Magnifier over date aperture
Date works on inner dial hours and is there-
fore always perfectly co-ordinated for
pilot's use

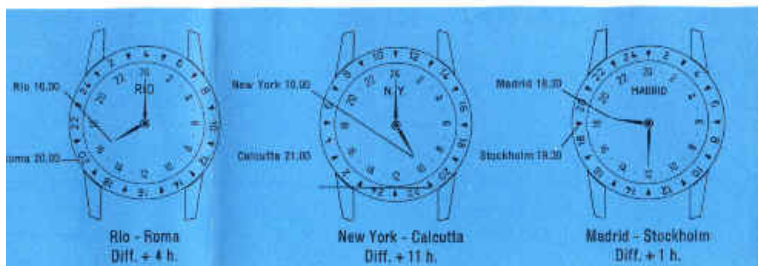
Special 24 hour dial with luminous dots
and hands

**Sweep second-stop for
time-setting to-the-second**
(read point 7 on next page)

Sweepsecondhand with luminous tip
Tail end on hourhand for easy lecture of PM
time

24 hour inner and outer dial with safety
lock for outer dial

Guaranteed and Serviced by the manufac-
turer, GLYCINE+ALTUS WATCH
FACTORIES, INC., Biemme, Switzerland and
GLYCINE SALES AND SERVICE CENTER
2510 BRENTWOOD BLVD., ST. LOUIS,
MO. 63144



WHEN IT IS NOON IN LONDON (G.M.T.)

the local standard times are as follows:

Algeria	10 a.m.	Ethiopia	9 p.m.	Nigeria	1 p.m.
Argentina	8 a.m.	Finland	7 p.m.	Norway	1 p.m.
Australia		France	1 p.m.	Panama	7 a.m.
Melbourne	10 p.m.	Germany	1 p.m.	Paraguay	8 a.m.
Sydney	10 p.m.	Greece	2 p.m.	Peru	7 a.m.
Darwin	10:30 p.m.	Italy	7 a.m.	Philippine Is.	8 p.m.
Austria	1 p.m.	Hawaiian Is.	3 a.m.	Poland	1 p.m.
Acres	10 a.m.	Hongkong	8 p.m.	Portugal	12 a.m.
Bahamas	1 p.m.	Hungary	1 p.m.	Puerto Rico	8 a.m.
Bahama	8 a.m.	Iceland	11 a.m.	Romania	2 p.m.
Bahia	8 a.m.	India Bombay	10:30 p.m.	Salvador	6 a.m.
Bahia	8 p.m.	Calcutta	9 p.m.	Sierra Leone	12 a.m.
Brazil		Indochina	8 p.m.	South Africa	
Rio de Janeiro	9 a.m.	Iran	10:30 p.m.	(White Cl)	1 p.m.
British Guiana	8:15 a.m.	Iraq	3 p.m.	Soviet Union	
Bulgaria	12 p.m.	Ireland	12 a.m.	Leningrad	3 p.m.
Burma	8:30 p.m.	Israel	3 p.m.	Moscow	3 p.m.
Canada Montreal	7 a.m.	Italy	1 p.m.	Vladivostok	10 p.m.
Winnipeg	6 a.m.	Jamaica	7 a.m.	Spain	10 a.m.
Santiago	4 a.m.	Japan	9 p.m.	Sudan	5 p.m.
Chile	8 a.m.	Korea	3 p.m.	Swaziland	1 p.m.
China Chungking	7 p.m.	Korea	3 p.m.	Switzerland	1 p.m.
Shanghai	8 p.m.	Lebanon	2 p.m.	Syria	2 p.m.
Colombia	7 a.m.	Liberia	12 a.m.	Thailand	7 p.m.
Congo		Luxembourg	10 a.m.	Trinidad	8 a.m.
West	1 p.m.	Madagascar	3 p.m.	Tunisia	1 p.m.
East	2 p.m.	Madeira	11 a.m.	Turkey	2 p.m.
Costa Rica	6 a.m.	Malay States	7 p.m.	Uruguay	8:30 a.m.
Cuba	7 a.m.	Mexico	5 a.m.	U.S.A.	
Curaçao	7:30 a.m.	Morocco	12 a.m.	New York	7 a.m.
Czechoslovakia	1 p.m.	Netherlands	1 p.m.	Chicago	6 a.m.
Denmark	1 p.m.	New Caledonia	11 p.m.	Los Angeles	4 a.m.
Equador	7 a.m.	Newfoundland	8:30 a.m.	Venezuela	7:30 a.m.
Egypt	8 p.m.	New Zealand	12 p.m.	Yugoslavia	1 p.m.

OFF SITE

[OUR FREE GLYCINE AIRMAN.pdf](#)
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