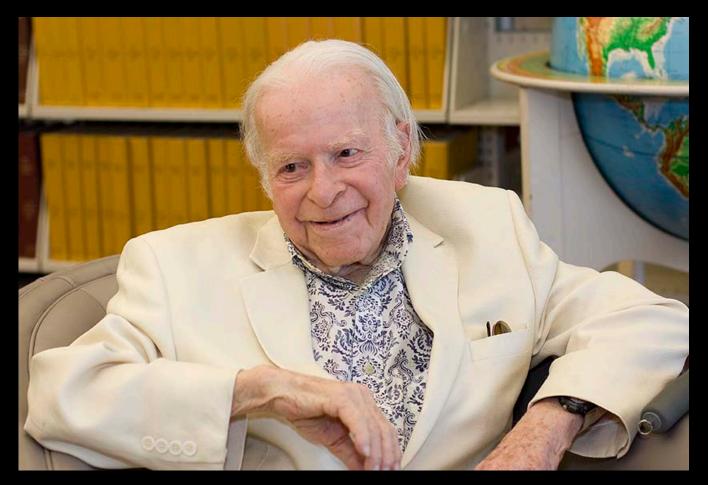
The Joy and Adventure Of Exploring the Atmosphere



"If you can preserve these two wonderful afflictions (curiosity and the joy of adventure) through your life, you will never be able to stop exploring the atmosphere."

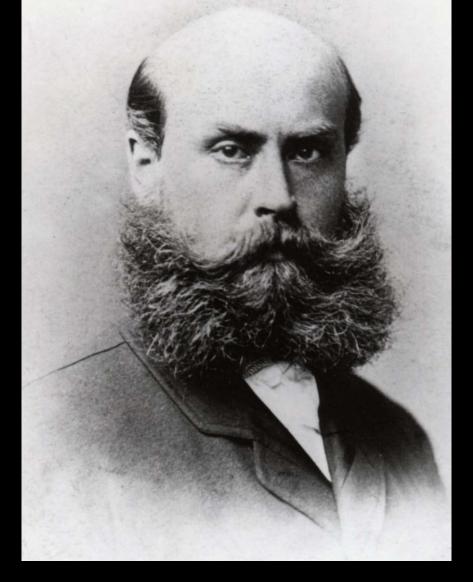
Joach Kuettner

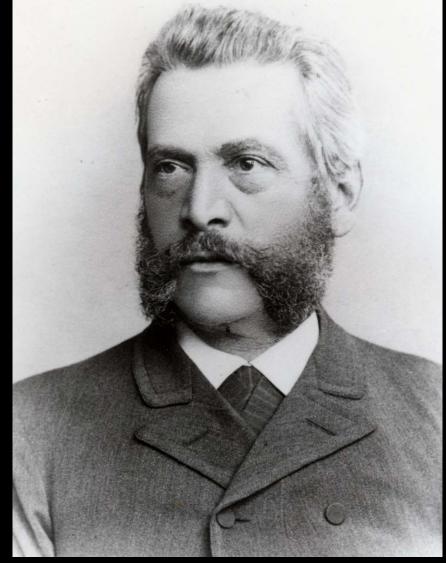


Joach's entrance into the world - September 21, 1909! Photos from Breslau, Germany, Joach's birthplace



Joach, three years old





Joach's Paternal Grandfather Joach's Maternal Grandfather



Zugspitze Mountain Observatory in the Alps. Joach became Chief of the Observatory in 1945 and held this position until he went to the United States in 1949.



Zugspitze Mountain Observatory in the Alps



Cablecar to get up to the Zugspitze Mountain Observatory in the Alps



Joach and Monika's wedding photograph, August 3, 1949



Monika and Joach, approximately 1968

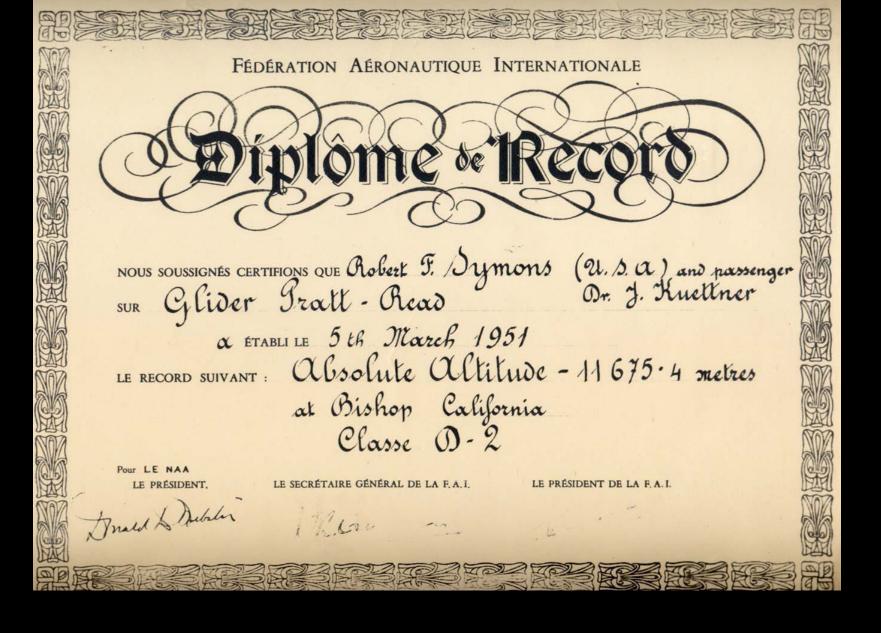


One of Joach's favorite photos of Monika!

Taken shortly before
Joach and Monika
married. Monika was
a very successful
actress in the State
Acting School of
Munich.



Mountain Wave near Bishop, California, taken before the Sierra Wave-Jetstream Project began, 1950



Joach and Bob Symons set an international record for a two-seater glider, the Pratt-Read, in 1951.



Joach and participants in the Sierra Wave Project, 1951

THE SOARING SOCIETY OF AMERICA, INC.



PAUL E. TUNTLAND AWARD

PRESENTED TO

JOACHIM KUETTNER

IN RECOGNITION OF DISTINGUISHED
SERVICE TO FURTHER THE SCIENCE
OF SOARING
DURING THE YEAR

1952



PRESIDENT, SSA

CHAIRMAN, AWARDS COMMITTEE SSA



Joach with instrumented side-by-side two-seater experimental sailplane flown in the Sierra Wave-Jetstream

Project over California, 1955



Joach and Bob Rados, during the Sierra Wave-Jetstream Project.

Rados was Director of the Television and Infra-Red Observation Satellite (TIROS). This was the first ever weather satellite.



Harold Klieforth (scientific observer in the rear seat) and Joach in the Switzer 2-25 high-performance glider used in the Sierra Wave-Jetstream Project



Joach in the Switzer 2-25 high-performance glider used in the Sierra Wave-Jetstream Project



Larry Edgar, Ray Parker, John Robinson, and Joach suited up for the Sierra Wave-Jetstream Project



During the second phase of the Sierra Wave-Jetstream Project, Larry Edgar's glider was destroyed by severe turbulence. Larry survived.



Severe mountain wave development during the Sierra Wave-Jetstream Project, 1955



DER DEUTSCHE AERO CLUB E. V.

HAT DEN AM 14. APRIL 1955

BISHOP/CALIF. (U.S.A.)

NACH DEN BESTIMMUNGEN DER F. A. I. AUSGEFÜHRTEN



VON

DR. JOACHIM KÜTTNER

BISHOP CALIF.
ALS NATIONALEN REKORD

D1

LEISTUNG

13 015 m

ANERKANNT

FRANKFURT M DEN 31. MAI 1955

DER VORSITZENDE DER SPORTKOMMISSION

f him,

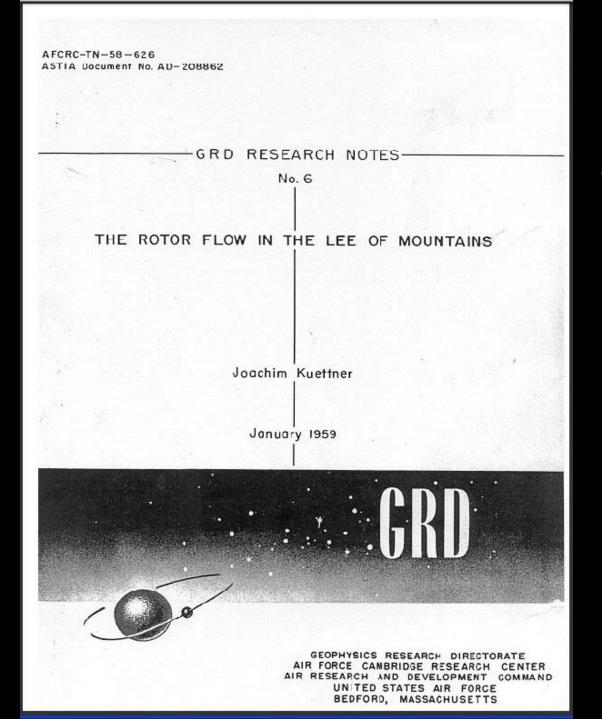
DER GENERALSEKRETAR World and German soaring altitude record, 13,015 M (43,000 feet) set by Joach over Bishop, California, May 31, 1955.

This is still a German record.

Einar Enevoldson and Steve Fossett broke Joach's World soaring altitude record in 2007.

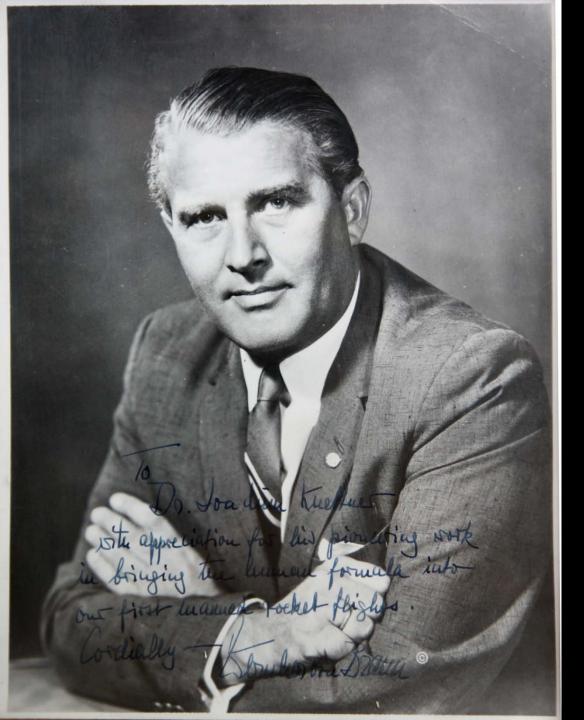


International Award given "for the most noteworthy contribution to soaring flight." Awarded to Joach in Osieczna, Poland, 1958.



"The Rotor Flow in The Lee of Mountains," January, 1959.

One of over 140 articles and publications written by Joach.



Wernher von Braun, one of the most important rocket developers and champions of space exploration during the period between the 1930s and the 1970s.

Dr. von Braun became the first director of NASA's Marshall Space Flight Center and the Chief architect of the Saturn V launch vehicle.

His dedication reads:
"To Joachim Kuettner – With appreciation for his pioneering work in bringing the human formula into our first manned rocket flights.
Cordially, Wernher von Braun"



All seven of the original Mercury Astronauts: from left to right, Scott Carpenter, Gordon Cooper, John Glenn, Gus Grissom, Wally Schirra, Alan Shepard, and Deke Slayton. Dedication reads: "With warmest personal regards to Dr. Joachim Kuettner – from the 'Mercury Astronauts'."



Mercury Astronaut
Scott Carpenter had
the unique distinction of
being the first human ever
to penetrate both inner
and outer space, thereby
acquiring the dual title,
Astronaut/Aquanaut.

Carpenter's dedication reads, "To Joachim with sincere respect and admiration.
Scott Carpenter"

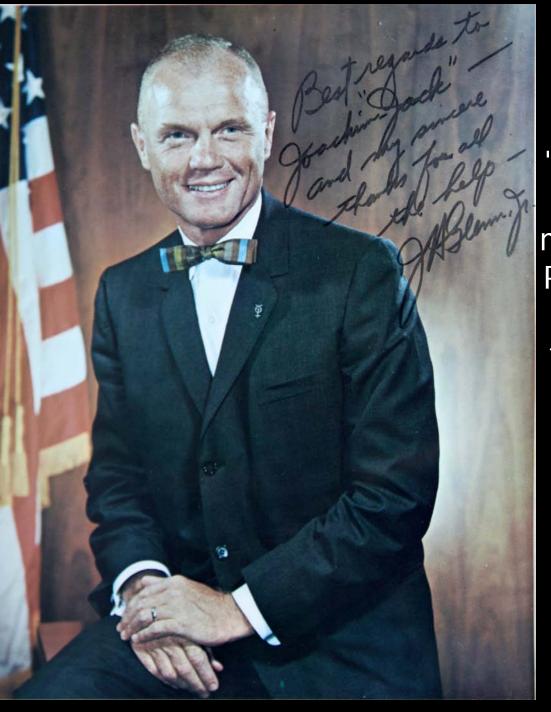


Astronaut Gordon Cooper flew the longest spaceflight of the Mercury project, was the first American to sleep in orbit, and was the last American to launch alone into Earth's orbit and conduct an entire solo orbital mission.

Dedication on photo reads: "All Best regards, To my good friend, Jack. Gordon Cooper"



Joach with Astronaut Gordon Cooper inspecting the Mercury-Redstone rocket. Photo from Life Magazine, 1959



Astronaut John Glenn, who piloted the Mercury-Atlas 6
"Friendship 7" spacecraft on the first manned orbital mission of the United States. Prior to his first flight, Glenn had served as backup pilot for Astronauts Shepard and Grissom.

Dedication on photo reads:
"Best regards to Joachim
'Jack' – and my sincere
thanks for all the help.
John B. Glenn Jr."



Astronaut Gus Grissom flew in this rocket on July 21, 1961. He piloted the Mercury "Liberty Bell 7" spacecraft -- the second and final suborbital Mercury test flight. He later commanded the first manned Gemini flight and was one of the three astronauts flying on the first Apollo Mission.

Grissom's dedication reads:
"Thanks Jack for making
this a wonderful day!
Gus Grissom
Liberty Bell 7"



Joach and
Astronaut Gus
Grissom with a model
of the MercuryRedstone rocket.

Gus and Joach were
Co-chiefs in the
Mercury-Redstone
Project. Gus was
attached to this project
by the Houston Space
Center.



Astronaut Wally Schirra was the only one to fly in the Mercury, Gemini and Apollo Space programs.

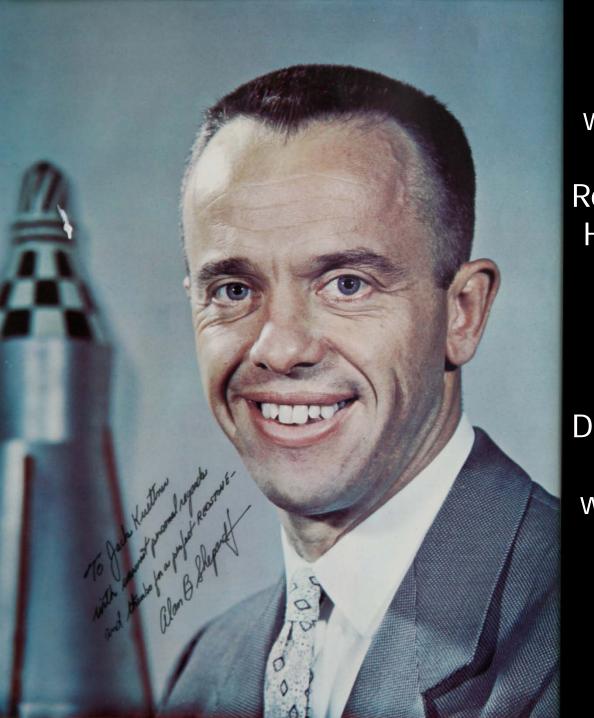
Shirra's dedication reads,

"Best wishes Joachim –

Thank you for your

high flying spirit.

Wally Schirra"



Astronaut Alan Shepard was the first American in space with the Mercury-Redstone project in 1961. He later commanded the Apollo 14 mission and was the fifth person to walk on the moon.

Dedication on photo reads:

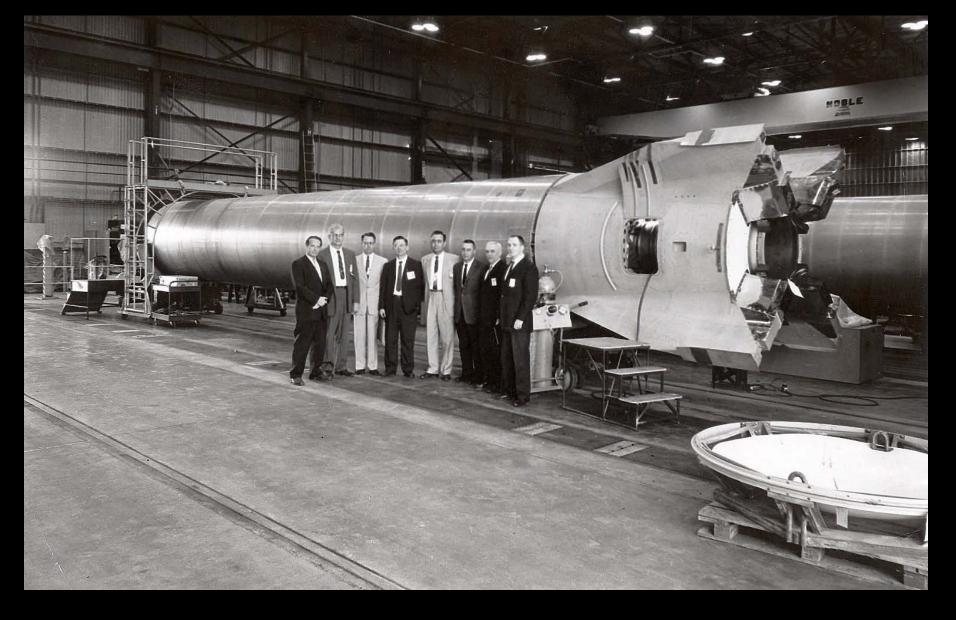
"To Jack Kuettner, with
warmest personal regards
and thanks for a perfect
REDSTONE.
Alan B. Shepard"



During the international record setting event with the Pratt-Read Glider, Bob Symons experienced an "urgent" bodily function need. Thus, he and Joach spun the glider down and descended from 38,000 feet to the ground in SIX minutes!!! Hence, the Order of the Streamlined Brick Award.



Joach handing Astronaut Alan Shepard his own *Order of the Streamlined Brick* Award in 1961. He beat Joach and Bob Symon's "brick" record by descending from 100,000 feet in THREE minutes in the space capsule!



Joach with Astronauts Lovell, Schirra, Grissom and others standing in front of the Mercury-Redstone rocket



Wernher von Braun, Director, Marshall Space Flight Center, Huntsville, Alabama in the pilot's position, in the Gemini Simulator. Joach is in the Co-pilot's seat. Warren North, left, Deputy Director of the Flight Crew Support Division, observes. Photo taken at the Manned Spacecraft Center Houston, Texas. October 14, 1964.



Joach before a Mercury-Redstone launch with a payload



Astronaut Neil Armstrong, Hanna Reitsch, and Joach. After Armstrong landed on the moon, Joach accompanied him on a tour of Europe. Reitsch was the first woman to fly a helicopter, a rocket plane, and a jet fighter. She set over forty aviation altitude and endurance records during her career. Several of her international gliding records are still standing.



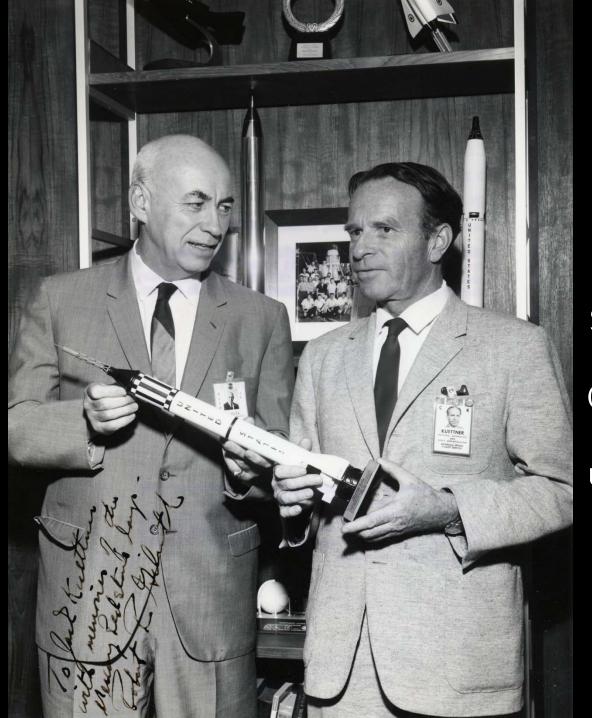
Hanna Reitsch and Joach standing in front of the Saturn test stand in Huntsville, Alabama



Astronaut Frank Borman, on the right. He was the first person to fly around the moon and was the commander for this mission. Frank and Joach were co-chairs of the Apollo Crew Safety Panel.

Borman's dedication reads:

" To Joachim, With
appreciation from a friend
and former partner.
Frank Borman"



Robert Gilruth and Joach, holding a model of the Mercury-Redstone rocket. Gilruth was Head of the NASA Houston Manned Spacecraft Center (MSC) (now the Johnson Space Center). Gilruth served as director of the MSC until 1972 and oversaw a total of 25 manned spaceflights, from Mercury-Redstone 3 to Apollo 15.

UNITED STATES DEPARTMENT of COMMERCE

GOLD MEDAL AWARD

Presented to

JOACHIM KUETTNER

for Distinguished Achievement in the Federal Service



For outstanding achievement in furthering man's understanding of the relationship between the ocean and the atmosphere.

October 14, 1969

Maurice H. Stans Secretary of Commerce

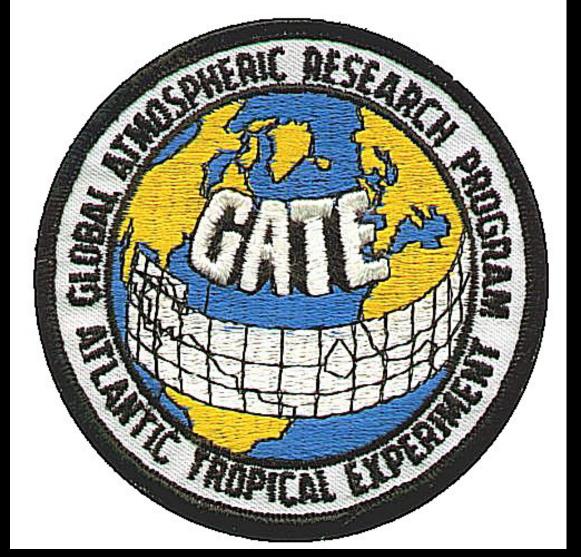




John Firor, NCAR Director, and Joach, 1970



Joach with Walt Roberts, who established NCAR and became its first director, examining the electronics on the NCAR Electra aircraft.



Sleeve patch from International GATE Field Project (the GARP [Global Atmospheric Research Program] Atlantic Tropical Experiment, 1974). Over 70 nations, 40 ships, 13 aircraft, and 4000 people (including support staff) participated in this huge, complex field program.









Shots of some of the many consultations and meetings to develop consensus for the missions during the International GATE Field Project



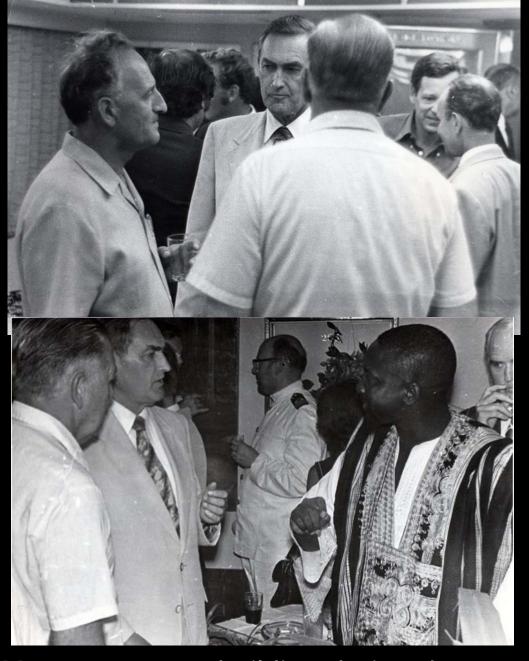
NCAR Electra Aircraft used in the GATE Field Project conducted over the tropical Atlantic Ocean, Africa, and South America



These three ships tied together are the West German *Meteor* on the left, a U.S. Navy ship in the middle, and East German *Humbold* on the right. Since this was during the Cold War and East Germans could not directly associate with the West Germans, the Americans acted as intermediaries for crew visiting the other ships. The U.S. ship served as "Checkpoint Charlie" and a bottle of beer per person was the charge. During the International GATE Field Project, 1974.



Building consensus during the International Gate Field Project. From left to right: Dr. D. Sargeant (USA), Professor Borovikov (USSR), Dr. Sitnikov (USSR) and Joach.



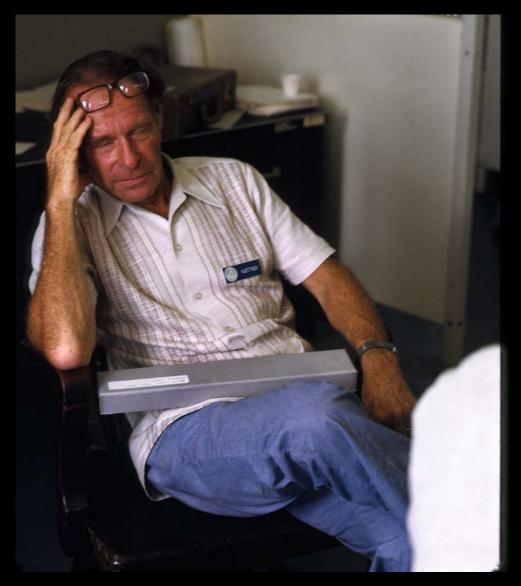
Far left, Dr. Petrossiants, Professor of Meteorology, Moscow. Colonel Barney in center of photo

Second from left, Colonel Barney, GATE Technical Director of the American delegation

More consensus building during the International Gate Field Project.



Monika and Joach during a GATE Field Project reception. Joanne Simpson has her back to the camera.



An exhausted Joach during GATE

American Meteorological Society



The Cleveland Abbe Award for Distinguished Service to Atmospheric Sciences by an Individual is conferred upon

Toachim P. Kuettner

for his extraordinary leadership and vision in planning and implementing complex international scientific programs; and in recognition of his outstanding lifetime record of achievements as productive scientist, intrepid experimenter inspiring administrator, patient negotiator, and skillful diplomat, to the enduring benefit of human knowledge and welfare.

American Meteorological Society

Robert G. Flengle

President

January 1982

ÖSTERREICHISCHE GESELLSCHAFT FÜR METEOROLOGIE

DER VORSTAND DER ÖSTERREICHISCHEN GESELLSCHAFT FÜR METEOROLOGIE HAT BESCHLOSSEN.

DR. JOACHIM P. KÜTTNER

IN WÜRDIGUNG HERVORRAGENDER VERDIENSTE UM DIE METEOROLOGISCHE WISSENSCHAFT DIE

GOLDENE

JULIUS VON HANN-MEDAILLE

ZU VERLEIHEN.

WIEN. AM 9. APRIL 1986.



d. profloslyasin

Per Kornad Cellak
VORSITZENDER

Julius von Hann Gold Medal given to Joach on April 9, 1986.

Julius von Hann
was the Director of the
Austrian Weather Service.
He created the theory
of the Foehn winds and was
also involved in the
research during the
GARP ALpine EXperiment
(ALPEX) Project.

DIE

DEUTSCHE METEOROLOGISCHE GESELLSCHAFT e.V.

verleiht die

Alfred - Wegener - Medaille

Herrn

Dr. Joachim P. Küttner

für seine hervorragenden Verdienste um die meteorolo gische Wissenschaft, insbesondere für die Erforschung der Überströmung von Gebirgen mittels instrumentierter Segelflugzeuge, sowie für die Organisation und wissenschaftliche Leitung großangelegter internationaler Forschungsprojekte, die unser Wissen über die globale Zirkulation der Atmosphäre bereicherten.

Münster / Westfalen 14. April 1986

Professor Dr. H.-W. Georgii Vorsitzender Joach was awarded the Alfred-Wegener Medal on April 14, 1986.

Wegener was a world famous geologist and meteorologist who developed the theory of continental drift. He died during an expedition on the Greenland ice.



Joach feeding pet cat at home in Boulder



Joach and Walt Roberts, first Director of NCAR and first President of UCAR (estimated date of photo: 1989)



Karyn Sawyer and Joach conferring at the Kuettner Symposium, at NCAR, 1994



Joach and Monika at his 85th Birthday celebration, NCAR Mesa Lab Damon Room



Joach, Joanne, and Robert Simpson, at the 1994 Kuettner Symposium, NCAR



High-performance, hybrid, motorized, turbo-charged Stemme S10 Glider at sunrise, THERMEX Project, Boulder, Colorado airport, 1998



Joach and Wolf Herold with the turbo-charged Stemme glider THERMEX project



Joach, Colin Barry, and Wolf Herold with the Stemme S10 turbo-charged glider



Joach flying the Stemme S10 turbo-charged glider, THERMEX Project, 1998



Joach on vacation in Italy, near Capri



Joach and Monika on vacation in Italy

IN INCLYTA VNIVERSITATE LVDOVICO-MAXIMILIANEA MONACENSI

RECTORE MAGNIFICO

ANDREA HELDRICH

IVRISPRVDENTIAE DOCTORE PROFESSORE IVRIS CIVILIS IVRISQVE GENTIVM

RVDOLPHVS PETRVS KVDRITZKI

RERVM NATVRALIVM DOCTOR PROFESSOR ASTRONOMIAE HOC TEMPORE DECANVS SPECTATISSIMVS FACVLTATIS PHYSICAE

IOACHIMO KVETTNER

VRATISLAVIENSI

IVRISPRVDENTIAE ET RERVM NATVRALIVM DOCTORI
DISCIPLINAE METEOROLOGICAE IN VNIVERSITATE DIRECTORI
QVI EAM NATVRALIS PHILOSOPHIAE PROVINCIAM
QVAE IN VENTORVM NATVRA INVESTIGANDA VERSATVR
SINGVLARI ARTE MIRAQVE INGENII VBERTATE PLVRIMVM AVXIT

DOCTORIS RERVM NATVRALIVM GRADVM HONORIS CAVSA

EX VNANIMAE FACVLTATIS SVPRADICTAE DECRETO CONTVLIT
IN HVIVS REI TESTIMONIVM HOC PVBLICVM DIPLOMA
SIGILLO MAIORE VNIVERSITATIS ADIECTO
EIVSDEM FACVLTATIS DECANVS ATQVE RECTOR VNIVERSITATIS IPSI SVBSCRIPSERVNT

MONACHII DIE IX MENSIS NOVEMBRIS ANNO DOMINI MIM

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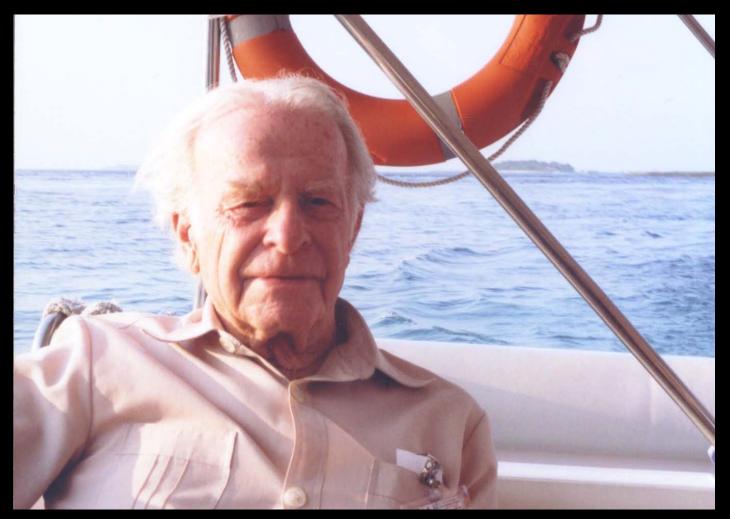
Honorary doctorate degree awarded to Joach from the University of Munich



Aircraft used in the Mesoscale Alpine Program (MAP) at Innsbruck, 1999



Cloud photo taken from plane during MAP, 1999



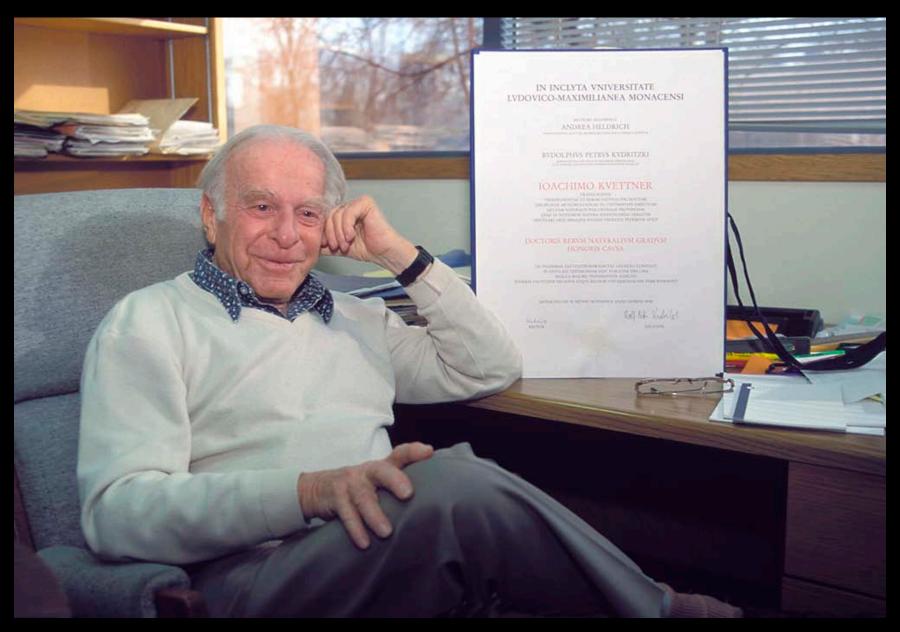
Joach, ferrying from Male to Kaashidhoo Climate Observatory, in the Maldives during the February-March 1999 INDOEX Field Campaign (INDOEX – INDian Ocean (aerosol) Experiment)

The Regents of the University of Colorado have conferred on Joachim Peter Kuettner the Conorary Degree Doctor of Science Conoris Causa with all the rights and privileges thereunto appertaining. In witness thereof this diploma is awarded by the Regents Signed and Sealed on the fourteenth day of May, A.B. nineteen hundred and ninety-nine and in the one hundred twenty-third year of the University. How I fell Chair, Board of Regents John C. Bucher Milyer Carelle Returd Byy

Honorary Doctorate of Science given to Joach by CU, May 14, 1999



Joach's 90th birthday party, hosted by Rick Anthes. From left to right: Harriet Barker, Bob Grossman, Karyn Sawyer, Joach, Susie Anthes, Judy Curry, Peter Webster, and Monika



Joach in his UCAR office in Boulder, in 2000 The doctorate from Munich is on his desk.



Celebration of the 100th anniversary of the meteorological station on top of the Zugspitze, July 19, 2000. Joach became an "Honorary Member of the German Meteorological Society" (DMG). Peter Winkler is handing Joach the membership certificate.



Joach with Klaus Ohlmann, Winner of the Kuettner Prize for the first straight out 2000 km flight in a glider using mountain waves. At the Stemme factory, Berlin, Germany, 2002



Joach with Klaus Ohlmann, Berlin, Germany, 2002



Veerabhadran Ramanathan and Joach planning the Global Albedo Project, 2005



Joach exiting the NCAR-NSF HIAPER aircraft after flying during the Terrain-induced Rotor EXperiment (T-REX) Project,
California Sierra Nevada Range, 2006



Joach and Carlye Calvin at the T-REX Project, California Sierra Nevada Range, 2006. NCAR-NSF HAIPER aircraft in background



Kuettner Family
From left to right:
Angela, Bonnie, Monika, Michael, Joach, Christopher, and Peter
2004



Monika Kuettner's original artwork honoring Joach's 100th birthday



Monika Kuettner's original artwork honoring Joach's 100th birthday



Four scale model planes created and built by Peter Kuettner for Joach's 100th birthday. From left to right: Pratt-Read Glider, Sierra Wave-Jetstream Project; Messerschmitt, ME 323 "Gigant"; Messerschmitt ME 109-E Fighter; Fieseler F-103 RE-4, Manned V-1



Explorative Himalayan Mountain Wave Experiment (est 1993-1995). The motorized glider is flown by Alvaro de Orleans, Vice President of the Federation Aeronautique Internationale. Alvaro is in the red flight suit. Joach is second from the right.



THE WHITE HOUSE WASHINGTON

Happy 100th Birthday! We wish you the very best on this momentous occasion.

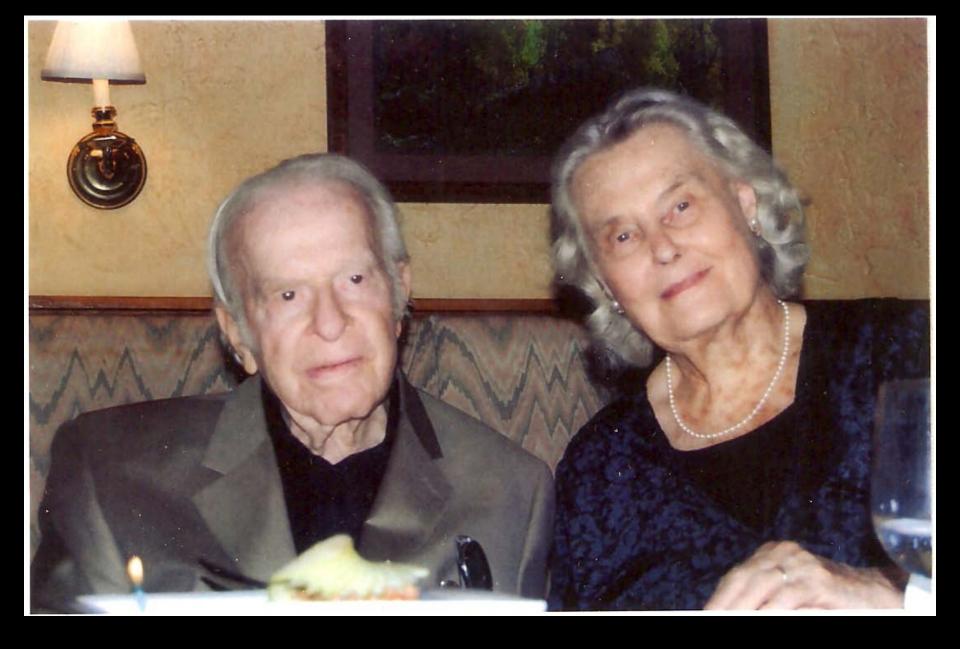
You have witnessed great milestones in our Nation's history, and your life represents an important piece of the American story. As you reflect upon a century of memories, we hope that you are filled with tremendous pride and joy.

Congratulations on your birthday, and may you enjoy many more happy years as a centenarian.

Sincerely,

But mikele Oban

Best wishes to Joach on his 100th Birthday from President Obama



Joach and Monika, 2009



Karyn Sawyer and Joach, NCAR Library, 2009



Becky Meitin and Joach, Kuettner home, 2009



Becky Meitin and Monika, Kuettner home, 2009



Rick Anthes and Joach sharing the "secret" of Goldwasser!



Thank you all for coming!!!!