GENERAL - 154-1-18 INTER-OFFICE CORRESPONDENCE

- The state of the	DATE May 15, 1981
то	REFERENCE
Dr. E. E. David, Jr.	SUBJECT
Henry Shaw	CO ₂ Position Statement

In case the issue comes up at the San Francisco Symposium, attached is a brief summary of our current position on the ${\rm CO}_2$ Greenhouse effect.

HS:ksc Attachment

- c: R. E. Barnum C. M. Eidt, Jr.
 - D. Fiske
 - L. E. Furlong
 - H. C. Hayworth
 - T. K. Kett

 - P. J. Lucchesi
 F. B. Sprow
 H. N. Weinberg
 G. O. Wilhelm

 - M. Held

PRELIMINARY STATEMENT OF EXXON'S POSITION ON THE GROWTH OF ATMOSPHERIC CARBON DIOXIDE

Position:

There is sufficient time to study the problem before corrective action is required.

- An indication of the average global temperature increase due to CO, will not be measurable above normal climatic fluctuations (noise) until about 2000.
- Effective energy conservation and high price for fossil fuels over the last few years have now delayed the projected doubling time of CO₂. We estimate now that the doubling time is about 100² years.
- This permits time for an orderly transition to non-fossil fuel technologies should restrictions on fossil fuel use be deemed necessary.

Synthetics Impact:

There is no reason to stifle or halt development of synthetics industry.

- Impact of synthetics on doubling time is very small (4%/yr average synthetics growth rate reduces doubling time by only 5 years = 15 MB/D synthetics in 2010).
- Coal liquids contribute about 100% more CO, than burning coal directly; shale oil about 50% more.

Background:

- Average atmospheric CO, increased 7% since 1957 (315 to 338 ppm). We project CO2 will reach about 380 ppm by 2000.
- Atmospheric CO2 will double in 100 years if fossil fuels grow at 1.4%/a.
- 3°C global average temperature rise and 10°C at poles if CO, doubles.

- Major shifts in rainfall/agriculture - Polar ice may melt

- U. S. Government conducting 10-year study at 10M\$/a to reduce large scientific uncertainties and recommend appropriate energy policy.
- ERSE contributing to the research effort by monitoring atmospheric and oceanic CO, from a tanker.