

MINUTES OF THE NSBF ADVISORY PANEL

23, 24 JUNE 1980

NCAR - BOULDER, COLORADO

The meeting was convened by Chairman Kniffen at 1300 on 23 June 1980. Members present were Kniffen-Chairman, Heidt, Lewin, Mueller, Pelling and White. Others present were Murino-ATD/NCAR, Peacock-NSF, Smith and Shipley-NSBF/NCAR, Serafin-ATD/NCAR. Also in attendance on 24 June was Dr. Robert White, UCAR President.

The meeting commenced with the statement of the requirement to elect a new Panel Chairman since Chairman Kniffen's term was to expire before the next meeting. A motion was made and carried that Kniffen's term be extended another year and that he be retained as chairman for that time period.

ITEM I - APPROVAL OF MINUTES OF LAST MEETING

The following corrections and revisions were made:

- A. Page 3, line 1: Delete "Each failure was discussed in detail" and revised to read "Failures that had occurred during the year's operations were discussed in detail."
- B. Page 4, line 2: Revised sentence to read "It proved to be most valuable for NASA and for its effort, the NSBF received the NASA Group Achievement Award."
- C. Page 10, line 2: Insert sentence "It was suggested that the responsibility should be assigned to an individual and that a log be instituted as to the preventive maintenance performed on the hardware"

ITEM II - REMARKS BY THE DIRECTOR OF THE ATD

Murino briefed the Panel on the progress of the reorganization currently involving UCAR. Dr. Robert White, the new President of UCAR, would divide his time between his office in Washington, D. C. and Boulder, Colorado. He stated that White would talk to the Panel at 0900 on Tuesday.

The position of Director of NCAR has been filled by Dr. Wilmot Hess. No replacement has been named for the Director of ATD. Dr. Robert Serafin, Manager of the Field Observing Facility, will serve as Acting Director until a replacement is found.

Murino presented what he felt were the current possible reorganizational schemes with respect to the NSBF. He stated that White would discuss the possibilities on Tuesday and that some proposal would be brought before the UCAR Board at the next UCAR Board Meeting in July.

It was stated that NASA supplemental funding for the NSBF could start with \$300K next fiscal year with future increases expected. This funding could then possibly be increased if a suitable memorandum of understanding could be generated between NSF and NASA.

ITEM III - OLD BUSINESS

A. Cost Recovery

Murino introduced the subject. It was felt that some method of obtaining additional funds for the NSBF must be made available. The current method being considered was the supplemental funding by NASA with an increase in funding in successive years. However, in conjunction, the amount of NSF funding would decrease by the difference between the amount required and that supplemented by NASA.

Some concern was voiced that the monies that NSF decreased its

contribution by would not remain for ballooning and the science utilizing balloons. In addition, concern was voiced that NASA would want more voice in the management of the NSBF.

Peacock-NSF stated that it was true that NASA would probably want more voice in the management of the NSBF, but it was not clear at present what this would entail. He stated that a memorandum of understanding would have to be agreed upon by NSF and NASA for the joint funding. However, NSF would retain final control.

With regard to the money released through the decrease in funding by NSF, Peacock stated that there may be some method agreed upon in the future for earmarking the funds for ballooning related science. However, there currently is no such device and it would be impossible to guarantee that the extra money would become available.

It was stated that the supplemental funding should be used in lieu of a user's fee. However, it was stated that NSF would not prevent UCAR from imposing a user's fee to obtain additional funds.

B. Australian Balloon Launch Station

Shipley stated that after the next expedition to Alice Springs, the Australians will be closing down the station. It was stated that there is some anxiety existing, both here and in other countries, in regard to fewer flight opportunities due to the closing of the station.

Shipley stated that the NSBF would probably soon announce that the NSBF will mount expeditions, on a regular basis, to the Southern Hemisphere. He stated that Brazil is considering a permanent site and capability which may be more attractive in some cases. However, it was felt that Alice Springs is the preferential launch site for the

majority of flights in Australia.

It was suggested that if the flight requirements on the NSBF do increase, the NSBF may need to augment the current capabilities and staff to meet the increased demand.

C. User's Manual

Shipley stated that the comments on the rough draft of the User's Manual had been recently received. However, due to the heavy demand for services at the NSBF, nothing further has been accomplished on the final draft. It was stated that, to provide a comprehensive and detailed manual, will take a person at the NSBF dedicated to just that task.

ITEM IV - LONG DURATION PROGRAM

Shipley provided a brief review of the Sky Anchor XI balloon launch on 16 May 1980 from Malden, Missouri. The balloon system floated for 103 hours before being terminated.

The next scheduled Sky Anchor flight will occur this autumn from somewhere in the mid-U.S. probably from Malden, Missouri. If all is successful, then two flights will be conducted from Australia. The first flight will be an engineering flight and the second flight will be a scientific flight.

When asked about the future scaling up of the system, Shipley replied that, with the existing capabilities in balloon materials and manufacturing the NSBF should be capable of scaling up the present system to carry a 1000 lb payload. As for a 2000 lb payload, additional developmental work may be required to achieve that goal.

The meeting was adjourned shortly thereafter for the day and was reconvened the next morning at 0900.

ITEM V - NEW BUSINESS

A. Discussion with Dr. Robert White - UCAR President

Dr. White presented the current possibilities regarding the reorganization with respect to the NSBF in the NCAR-UCAR framework. White stated that he thought that the NSBF was under-supported and under-recognized for its achievements. He said that some method must be devised to elevate the NSBF into a more visible position so that additional funding may be made available.

White outlined three possible NSBF-NCAR-UCAR reorganizational schemes currently being considered which are:

- (1) Make the NSBF a separate division within NCAR,
- (2) Leave the NSBF as is within NCAR,
- (3) Remove the NSBF from NCAR and elevate it to the same level as NCAR, reporting directly to UCAR.

White stated that option 3 was the option that he favored because it offered higher visibility and stature, thus facilitating a method for obtaining additional funding and support.

White suggested the possibility of appointing a highly recognized chief scientist to provide scientific coordination involving NSBF-UCAR, the NSF, and the scientific ballooning community. This person would also represent the community and serve as a strong advocate in appropriate circumstances. The chief scientist would probably be able to continue on at his other current establishment should he or she choose to do so.

Another remote possibility discussed was internationalizing the NSBF in order to establish a broader economic base utilizing foreign funds. The NSF would still maintain final control over the

management of the NSBF, but cooperating nations could or would have some management inputs.

Lewin mentioned the National Academy of Sciences's report with regard to infrared astronomy chaired by George Fields. He stated that ballooning appeared insignificant in the report and unless something was done to put ballooning in a more favorable light before the report was printed, it could have some impact on balloon-science funding. White stated that if the Panel felt strongly enough about the matter, it should write a recommendation to UCAR to appoint a Blue Ribbon Panel to generate a report on balloon borne science and its accomplishments. UCAR could request the Academy to appoint an unbiased committee to study it. It was also suggested that Mueller make some effort to get more references to ballooning in the report if possible.

B. NSF-NASA White Paper

On June 3 and 4 a meeting was held between NSF and NASA. It was requested at this time that a White Paper should be written and published from the scientific community to support requests for additional funding from NASA and NSF. Kniffen stated that the rough draft had been completed, but that he held some reservations as to its quality since there had been very little time to write the paper. The rush was to get it finished for budgeting in the next fiscal year. Thus some quality was sacrificed.

C. Balloon Manufacturing

Shipley reported that the qualification of Raven for larger balloons has already had an impact on balloon prices. However, both

Raven and Winzen prices are still relatively high compared to preceding years. A large amount of the discussion concentrated on the possibility of UCAR becoming involved in balloon manufacturing if one or both balloon companies went out of the business. The Panel felt that it would be important to be prepared for this possibility and have a contingency plan if this were to happen.

D. COSPAR Ballooning Workshop

Shipley reported that the COSPAR meeting, in Budapest, was lacking somewhat in technical exchange and the discussions of the overall future of ballooning. However, as a solution to this problem he had been selected to help organize a COSPAR Ballooning Workshop to be held in Buenos Aires this December to present a technical exchange between the various ballooning countries and to discuss the overall future of ballooning throughout the world.

It was reported that there are, at present, approximately 14 or 15 countries carrying out ballooning operations. Some discussion was held with regard to this fact and it was suggested that this meeting might be an appropriate vehicle to investigate the possible internationalizing of the NSBF.

E. Summary of Action Items

1. Talk with Frank Martin about clarification of NASA Wallops role in view of any change of structure concerning NSBF-NSF-NASA.
2. Express to NSF-NASA concern of loss of funding for ballooning for the next fiscal year.

3. Obtain clarification of TDRSS usage by other than NASA funded scientists using long duration ballooning capabilities.
4. Write a recommendation to UCAR to establish a new committee or reconvene the Leighton committee to review why nothing has been done since the report was published 4 years ago.
5. Write a letter to UCAR endorsing planned reorganization involving the NSBF and the recommendation that the possibility of internationalizing the NSBF should be investigated more fully. In addition, UCAR should investigate further the possibility of becoming involved in the manufacturing of balloons and develop a contingency plan if UCAR has to become involved at some future date.

ITEM VI - DATE AND PLACE OF NEXT MEETING

It was decided that the next Panel meeting would be held at the NSBF on the 14-16 of January 1981. The meeting will convene at 0900 on the 14th and adjourn at 1200 on the 16th..

The Panel adjourned at 1250.